November 3, 2014

Mr. Jared Blumenfeld
Regional Administrator
USEPA – Region 9
75 Hawthorne Street
San Francisco, CA 94105

Subject:
American Airlines, Inc.
Los Angeles International Airport
Risk-Based Cleanup Approval Request

Dear Mr. Blumenfeld:

This letter presents American Airlines, Inc.'s (AA) risk-based cleanup approval request to address an October 7, 2013 release of polychlorinated biphenyl (PCB) transformer oil on a concrete electrical transformer pad (concrete pad) at the AA operations at Los Angeles International Airport (LAX). This approval request is being submitted at the request of U.S. Environmental Protection Agency (USEPA) Region 9.

The specific activities proposed in the letter include:

- Installing an epoxy coating systems to encapsulate the PCB-impacted concrete pad until such time that the hangar is decommissioned and the concrete pad is demolished.

- Implementing additional PCB characterization activities to determine appropriate waste management and disposal requirements for the concrete pad.

- Demolishing the concrete pad and transporting the material offsite for disposal, in accordance with PCB disposal requirements established under the TSCA regulations.

- Performing additional PCB characterization sampling to evaluate whether any potential PCB impacts exist to soil beneath and in the vicinity of the concrete pad.

- Preparing a letter report summarizing the additional waste characterization sampling results and presenting proposed remedial cleanup activities in the vicinity of the concrete pad area, if any.

Relevant background information is presented below, followed by a description of concrete pad cleaning and scarification activities, PCB characterization results, and a description of the proposed Phase 1 (concrete pad encapsulation) and Phase 2 (concrete pad demolition, waste characterization, and reporting) activities to manage residual PCBs in the vicinity of the concrete pad. A Certification Statement which contains information required under 40 CFR 761.61(a)(3)(E) is included as Attachment A to this letter.

I. Background Information

AA provides air transportation services at the Los Angeles International Airport (LAX), which is owned by Los Angeles World Airports (LAWA). AA performs equipment maintenance and storage operations at Hangar 3. Ancillary equipment for Hangar 3 includes an outside electrical substation approximately 50 feet south of the main Hangar 3 Building.

This electrical substation area is approximately 20-feet by 35-feet and access is limited as it is enclosed by an approximately 10-foot high cinder block wall on three sides and a chain link fence on the remaining side. A fence gate provides the only access into this area. The substation ground surface includes concrete slabs for equipment placement, with gravel around the slabs.

II. Discovery and Immediate Response

On October 7, 2013, an electrical transformer that serviced Hangar 3 at the AA operations at LAX located at 7001 World Way West – Los Angeles, California (Figure 1) was discovered to have shorted out and as a result, an estimated one quart of PCB oil containing Aroclor 1260 was released from a transformer insulator into the transformer cabinet and onto the surrounding concrete pad. The spill area on the concrete pad was approximately one foot by four feet.

PCB Aroclor 1260 was identified in the transformer oil at a concentration of 460,000 parts per million (ppm) (Table 1). AA personnel immediately covered and contained the spilled material with absorbents and placed a 5-gallon container below the insulator, creating secondary containment. There was no impact to the environment, as the material was contained entirely on the concrete pad. AA immediately contacted a spill response contractor, National Response Corporation (NRC) of Long Beach, California, to further contain the spill, remove the spilled oil, and completely drain and containerize the remaining PCB oil from the electrical transformer.

AA had NRC contain the spill and drain the remaining PCB oil from the transformer into 55-gallon drums. The oil was transported offsite for treatment/disposal at U.S. Ecology, Inc. of Beatty, Nevada (U.S. Ecology) as a TSCA-hazardous waste. Electrical equipment in the vicinity of the concrete pad was de-energized and the transformer was removed on February 10, 2014. The electrical transformer was transported offsite for disposal at Veolia ES Technical Solutions, LLC of Phoenix Arizona as a TSCA hazardous waste.

NRC bermed the release area and performed a total of three power washings of the concrete pad from October 7, 2013 through November 5, 2013. The area was cleaned using a double wash/rinse procedure, in accordance with 40 CFR 761 Subpart S, using Simple Green surfactant (first wash) followed by CAPSUR surfactant (second wash). Wipe sampling of the concrete pad surface was conducted flowing the power washings.

Wastes generated by the cleanup and washings were treated as TSCA waste and properly containerized and included PCB oil from the transformer; bentonite cleanup absorbent solids and

personal protective equipment (PPE) used during the cleanup; and wash water from wash/rinse with surfactants and PCBs. Total TSCA waste generated by the spill and cleanup actions included:

- Approximately 270 gallons PCB transformer oil
- Four 55-gallon drums of cleanup absorbents, debris, and PPE
- One 30-gallon drum of cleanup absorbents, debris, and PPE
- Three 55-gallon drums of wash water with PCBs

Waste manifests for material transported offsite for treatment/disposal are included in Attachment B.

Upon review of wipe sampling results (as summarized in Section IV below), full removal of the concrete pad was initially considered. However, an underground utility survey conducted on February 20, 2014identified an energized conduit in soil immediately adjacent to the concrete slab (estimated to be less than one foot below the surface) with junctions running into other energized equipment within the immediate area; an energized conduit was also identified overhead. Further, grounding wires were embedded within and in the vicinity of the concrete pad. The presence of these hazards could not be mitigated since the energized equipment is essential to hangar operations. Therefore, it was determined that pad removal was not operationally feasible. Following consultation with EPA Region 9, it was decided to scarify the surface of the concrete pad to address the remaining PCB levels.

III. Scarification Activities

Initial scarification was performed from February 24, 2014 through February 26, 2014 on a portion of the concrete pad with surface wipe sample results greater than the 10 micrograms per 100 square centimeters (µg/100 cm^2) cleanup criteria. Scarification was performed in an approximately 64 square feet area of the concrete pad to a depth of approximately 1-inch below the concrete surface using a rotary hammer drill. A vacuum equipped with a high-efficiency particulate air (HEPA) filter was used to capture airborne particulate generated by scarification activities. A total of six drums of dust & debris (476 kilograms [kg]) and one drum of liquids used for dust suppression (11 kg) were generated during scarification and transported offsite for treatment/disposal at U.S. Ecology as a TSCA-hazardous waste.

Concrete core analytical results collected following scarification activities indicated that PCBs were present at concentrations exceeding the 50 ppm PCB closure level in three of the 30 core samples collected. Each core location exceeding the level was overdrilled and additional confirmation samples were collected around each location. Concrete core results are discussed below. Waste manifests for material transported offsite for treatment/disposal are included in Attachment B.

IV. PCB Characterization Results

PCB characterization sampling was performed in several phases from October 7, 2013 through June 2, 2014 by NRC and ARCADIS. A total of 52 samples were collected and submitted for laboratory analysis of PCBs, including:

- One bulk sample of transformer oil from the release
- 9 concrete surface wipe samples following double wash/rinse activities
- 42 concrete core samples prior to and following scarification activities

A summary of the PCB sampling efforts and analytical results is presented in the table below.

Sample Type	Structural Surface	Detects / Number of Samples	Frequency Detected (%)	Detects Above Criteria	Maximum Detected	Mean
Bulk	Not Applicable	1/1	100	Not Applicable	460,000 ppm	460,000 ppm
Wipe	Concrete Pad	9/9	100	9	212 µg/100 cm^2	82.2 µg/100 cm^2
Core	Concrete Pad	27/42	64	6	1,810 ppm	71.4 ppm

Notes:
1. mg/kg = milligrams per kilogram or ppm
2. µg/100 cm^2 = micrograms per 100 square centimeters
3. Mean values calculated using the laboratory reporting limit for values that were not detected.

The tables included with this letter present the results for samples that have been utilized to characterize concrete surface, concrete core, and bulk transformer oil PCB concentrations. A figure identifying concrete surface and concrete core wipe sampling locations is included as Figure 2. Results for PCB sampling activities are presented in Tables 1 through 3.

Each concrete wipe sample result was greater than the 10 µg/100 cm^2 cleanup criteria and ranged from a concentration of 37 µg/100 cm^2 to 212 µg/100 cm^2. Results of the wipe samples collected from the concrete pad are presented in Table 2. The laboratory reports are presented in Attachment D.

Thirty concrete pad core samples were collected on a triangular grid with a maximum spacing of approximately 1.68 feet between sampling locations following concrete scarification activities described above. Based on the results, an additional 12 confirmation samples in the vicinity of CS04, CS17, and CS19 were collected. Concrete core samples were collected from a depth interval of 0-3" below the scarred surface, with the exception of three confirmation samples which were collected 3-6" below the scarred surface. PCBs were detected at a total of six locations (CS04, CS17, CS17B, CS17C, CS19, and CS19A) within the scarification area at concentrations exceeding 50 ppm (at a range of 113 ppm to 1,810 ppm). PCB concentrations in the concrete pad exhibit minor spatial variation, with somewhat higher PCB levels in the vicinity of the PCB oil release and lower concentrations with increasing distance from the release area. Results of the concrete floor core samples are presented in Table 3.

V. Proposed Activities

Phase 1 - Proposed Concrete Pad Encapsulation

To address the remaining levels of PCBs on the concrete pad, AA proposes to encapsulate the scarified area of the pad. The concrete pad is located in an active electrical substation area with restricted access secured by walls, chain link fence, and a locked fence gate. Activities in the vicinity of the concrete pad are minimal and primarily related to maintenance of the electrical equipment. The concrete pad area is considered a 'low-contact area' and encapsulation will be performed in accordance with the continued use authorization outlined in 40 CFR 761.30(p).

The scarified area of the concrete pad (approximately 64 square feet) will be prepared and coated using a double layer of contrasting color chemically-resistant non-volatile organic compound (VOC) epoxy coating, such as the Diamond-Novolac™ System (Attachment C), or an appropriate equal product. Concrete surface preparation and the epoxy coating installation will be performed in accordance with procedures identified by the manufacturer. Signs indicating the presence of PCBs in the encapsulated concrete surface will be posted at access points to the concrete pad area.

AA will inspect the double-layer epoxy coating system monthly until such a time that removal and cleanup efforts are commenced. Based on results of the monthly inspection, maintenance and repair of the epoxy surface will be performed as necessary. A properly maintained coating on the scarred area while utilizing the pad to support other electrical equipment will eliminate risk of exposure to workers or the environment until the hangar is decommissioned.

AA intends to address requirements for future use and management of the transformer pad area through the approach identified below.

Phase 2 – Concrete Pad Removal, Waste Characterization, and Reporting

Hangar 3 is scheduled to be decommissioned sometime in 2016 as part of LAWA's plans to construct a new concourse and ramp. As part of that decommissioning, the electrical transformer area will be de-energized, and remaining electrical equipment located on the pad will be removed. This equipment includes a distribution cabinet, a meter cabinet, and a switchgear cabinet; AA contracted Comet Electric of Chatsworth, California to perform an inspection of the substation to evaluate the potential presence of PCB-containing oil, articles, and equipment. Comet Electric provided a physical verification on September 18, 2014 that none of the remaining equipment contain any oils and/or PCBs. Therefore, equipment removal prior to the concrete pad sampling (discussed below) will not be handled under this application and will be completed prior to the commencement of the pad removal activities. AA will then demolish the concrete pad, perform additional characterization activities, and prepare a report to the USEPA presenting the results of the waste characterization and proposed cleanup activities, if any, as identified below.

Additional Concrete Core Sampling

Additional concrete core samples will be collected to further characterize the concrete pad prior to demolition and offsite transportation and disposal. The concrete sampling activities would include collecting samples in a grid, as described above, from areas outside the scarification area from 0-3", 3-12" and 12"-intervals below the concrete surface thereafter to the full depth of the concrete pad. Additional samples may also be collected from within the scarification area from 3-12" and 12"-intervals below the concrete surface thereafter to the full depth of concrete pad. Each sample will be submitted for laboratory analysis of PCBs by USEPA SW-846 Method 8082.

Concrete Pad Demolition and Removal

AA will demolish and remove the concrete pad to facilitate waste characterization of soil beneath the pad. Wastes and structural debris generated by concrete demolition activities will be managed in accordance with PCB remediation waste disposal requirements established under the TSCA regulations.

Concrete and debris removed from the concrete pad area that contain PCBs at concentrations equal to or exceeding 50 ppm will be transported for offsite disposal as a TSCA-regulated PCB waste. Wastes that contain PCBs at concentrations less than 50 ppm will be managed as non-TSCA-regulated waste.

Liquid wastes generated by future maintenance, decommissioning, and/or demolition activities will either be disposed of as a TSCA-regulated PCB waste or treated, as necessary, in accordance with the PCB decontamination standards presented in 40 CFR 761.79.

Soil Sampling

While there does not appear to be indications of soil impacts as a result of this release, AA, as requested by USEPA Region 9, proposes to characterize soil beneath and in the vicinity of the concrete pad by collecting surface and subsurface soil samples in the vicinity of the concrete pad area.

A grid with 5 feet spacing between sampling points will be established in the vicinity of the concrete pad to characterize soil adjacent to and beneath the concrete pad, in accordance with 40 CFR 761.283. The grid will extend a minimum of 5 feet beyond the spill area, or to the nearest structure (e.g., Hangar 3), in each direction. Soil samples will be collected from depths of 0-3", 3-12" and 12-24" bgs at the intersection of each grid line and submitted for laboratory analysis of PCBs by USEPA SW-846 Method 8082.

Based on evaluation of the soil characterization sampling activities, the analytical results will be compared to the applicable criteria, cleanup levels for low occupancy areas (40 CFR 761.61(4)(i)(B)).

Following review of soil characterization results, AA will at that time evaluate what, if any, further remedial activities are needed to address conditions at the site.

AA will prepare a letter report summarizing the results of the additional characterization activities. The letter report will include: (1) a description of the nature of impacts; (2) a summary of the sampling procedures and results; (3) the location and extent of impacts; (4) a cleanup plan (if any); (5) a written certification; and (6) necessary supporting tables and figures.

VI. Schedule

AA proposes to perform the Phase 1 (concrete pad encapsulation) activities within four weeks following USEPA approval of this letter, depending on weather. The encapsulation inspection and maintenance activities will begin following completion of encapsulation. Once AA and LAWA coordinate the decommissioning Hangar 3, which is currently believed to be early 2016, AA will notify the USEPA a minimum of 30-days prior to implementing the Phase 2 activities.

AA anticipates that additional concrete waste characterization, if needed, and concrete pad demolition can be performed in one to two months following the removal of remaining electrical equipment. Soil sampling beneath and in the vicinity of the concrete pad can be performed in one to two weeks following concrete pad demolition and removal. Approximately two months following receipt of analytical results, AA will submit a letter to the USEPA summarizing the Phase 1 and 2 activities and proposed remedial cleanup activities, if any.

VII Summary

The proposed Phase 1 and 2 activities described in this letter are appropriate for the concrete pad area. The proposed encapsulation, concrete pad removal, and waste characterization activities are technically sound, protective of human health and the environment, and cost-effective. Accordingly, AA requests that the USEPA approve the proposed management strategy for the concrete pad area as described above.

Please note that in providing this submittal, AA does not waive, but specifically retains and reserves, all legal rights, remedies and defenses with respect to this matter.

AA would appreciate your timely review of this risk-based cleanup approval request. AA would welcome the opportunity to meet with the USEPA to discuss this request. Please do not hesitate to contact me at (817) 931-2765 or Michael C. Jones of ARCADIS at (315) 671-9211 if you have any questions or would like to schedule a meeting.

Sincerely,

American Airlines

John Haney
Environmental Specialist

Copies:
Cynthia Ruelas, USEPA
Carmen Santos, USEPA
Michael C. Jones, ARCADIS
Laura B. Curtis, ARCADIS
Michael Asakawa, ARCADIS
Robert Freeman, Los Angeles World Airports

TABLE 1
BULK TRANSFORMER OIL PCB ANALYTICAL RESULT (ppm)

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

Sample ID:	TSCA Hazardous Waste Criteria	78243-1
PCBs		
Aroclor 1016	- -	ND
Aroclor 1221	- -	ND
Aroclor 1232	- -	ND
Aroclor 1242	- -	ND
Aroclor 1248	- -	ND
Aroclor 1254	- -	ND
Aroclor 1260	- -	460,000
Total PCBs	50	460,000

Notes:
1. Sample was collected by NRC Environmental Services of Long Beach, California on October 7, 2013.
2. PCBs = Polychlorinated biphenyls.
3. TSCA = Toxic Substances Control Act.
4. ND = Not Detected.
5. Samples were analyzed by NRC Environmental Services located in Long Beach, California on October 8, 2013 for PCBs using United States Environmental Protection Agency SW-846 Method 8082.
6. All concentrations reported in parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
7. TSCA hazardous waste criteria is from Title 40 of the Code of Federal Regulations Part 761.61(a)(5)(i)(B)(2)(iii).
8. Shading indicates that the result exceeds the TSCA PCB hazardous waste criteria.

TABLE 2
CONCRETE WIPE PCB ANALYTICAL RESULTS (10 µg/100cm^2)

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

Sample ID: Laboratory ID: Date Collected: Date Analyzed:	TSCA High Occupancy Cleanup Criteria for Non-Porous Surfaces	Floor Sample 131014-25 10/14/13 10/16/13	#1 131021-87 10/21/13 10/21-22/13	#2 131021-88 10/21/13 10/21-22/13	#3 131021-89 10/21/13 10/21-22/13	#4 131021-90 10/21/13 10/21-22/13	#5 131021-91 10/21/13 10/21-22/13
PCBs							
Aroclor 1016	- -	ND	ND	ND	ND	ND	ND
Aroclor 1221	- -	ND	ND	ND	ND	ND	ND
Aroclor 1232	- -	ND	ND	ND	ND	ND	ND
Aroclor 1242	- -	ND	ND	ND	ND	ND	ND
Aroclor 1248	- -	ND	ND	ND	ND	ND	ND
Aroclor 1254	- -	ND	ND	ND	ND	ND	ND
Aroclor 1260	- -	212	11.9	13.1	11.5	147	47.5
Aroclor 1262	- -	NA	NA	NA	NA	NA	NA
Aroclor 1268	- -	NA	NA	NA	NA	NA	NA
Total PCBs	10	212	11.9	13.1	11.5	147	47.5

Sample ID: Laboratory ID: Date Collected: Date Analyzed:	TSCA High Occupancy Cleanup Criteria for Non-Porous Surfaces	WS-1 13-11-1721-1 11/21/13 11/22/13	WS-2 13-11-1721-2 11/21/13 11/22/13	WS-3 13-11-1721-3 11/21/13 11/25/13
PCBs				
Aroclor 1016	- -	< 50	< 50	< 10
Aroclor 1221	- -	< 50	< 50	< 10
Aroclor 1232	- -	< 50	< 50	< 10
Aroclor 1242	- -	< 50	< 50	< 10
Aroclor 1248	- -	< 50	< 50	< 10
Aroclor 1254	- -	< 50	< 50	< 10
Aroclor 1260	- -	130	130	37
Aroclor 1262	- -	< 50	< 50	< 10
Aroclor 1268	- -	< 50	< 50	< 10
Total PCBs	10	130	130	37

Notes:
1. Samples were collected by NRC Environmental Services of Long Beach, California on the dates indicated.
2. PCBs = Polychlorinated biphenyls.
3. TSCA = Toxic Substances Control Act.
4. NA = Not Analyzed.
5. ND = Not Detected.
6. < = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
7. Samples were analyzed by NRC Environmental Services located in Long Beach, California for PCBs using United States Environmental Protection Agency SW-846 Method 8082.
8. All concentrations reported in micrograms per 100 square centimers (µg/100cm^2).
9. TSCA high occupancy cleanup criteria for non-porous surfaces is from Title 40 of the Code of Federal Regulations Part 761.61(a)(4)(ii).
10. Shading indicates that the result exceeds the TSCA high occupancy cleanup criteria for non-porous surfaces.

TABLE 3
CONCRETE CORE PCB ANALYTICAL RESULTS (ppm)

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

Sample ID: Date Collected: Date Analyzed:	TSCA Hazardous Waste Criteria	CS 01 03/27/14 04/02/14	CS 02 03/27/14 04/02/14	CS 03 03/27/14 04/02/14	CS 04 03/27/14 04/03/14	CS 04A 06/02/14 06/04/14	CS 04B 06/02/14 06/04/14	CS 04C 06/02/14 6/4-5/2014	CS 04D 06/02/14 6/4-5/2014	CS 05 03/27/14 04/03/14	CS 06 03/27/14 04/03/14
PCBs											
Aroclor-1016	- -	< 0.05	< 0.05	< 0.05	< 25	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05
Aroclor-1221	- -	< 0.05	< 0.05	< 0.05	< 25	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05
Aroclor-1232	- -	< 0.05	< 0.05	< 0.05	< 25	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05
Aroclor-1242	- -	< 0.05	< 0.05	< 0.05	< 25	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05
Aroclor-1248	- -	< 0.05	< 0.05	< 0.05	< 25	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05
Aroclor-1254	- -	< 0.05	< 0.05	< 0.05	22 Jp	< 0.05	< 0.05	< 0.99	< 2.5	0.088 p	< 0.05
Aroclor-1260	- -	< 0.05	0.022 J	0.046 J	91	< 0.05	0.11	3.3	17	0.29	0.031 J
Total PCBs	50	ND	0.022 J	0.046 J	113 Jp	ND	0.11	3.3	17	0.378 p	0.031 J

Sample ID: Date Collected: Date Analyzed:	TSCA Hazardous Waste Criteria	CS 07 03/27/14 04/03/14	CS 08 03/27/14 04/03/14	CS 09 03/27/14 04/03/14	CS 10 03/27/14 04/03/14	CS 11 03/27/14 04/03/14	CS 12 03/27/14 04/03/14	CS 13 03/27/14 04/03/14	CS 14 03/27/14 04/03/14	CS 15 03/27/14 04/03/14	CS 16 03/27/14 04/03/14
PCBs											
Aroclor-1016	- -	< 0.05	< 0.05	< 2.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor-1221	- -	< 0.05	< 0.05	< 2.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor-1232	- -	< 0.05	< 0.05	< 2.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor-1242	- -	< 0.05	< 0.05	< 2.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor-1248	- -	< 0.05	< 0.05	< 2.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor-1254	- -	< 0.05	< 0.05	2.9 p	< 0.05	0.021 Jp	< 0.05	< 0.05	0.024 J	< 0.05	< 0.05
Aroclor-1260	- -	0.037 J	< 0.05	11	< 0.05	0.11	< 0.05	0.022 J	0.038 J	< 0.05	< 0.05
Total PCBs	50	0.037 J	ND	13.9 p	ND	0.131 Jp	ND	0.022 J	0.062 J	ND	ND

Sample ID: Date Collected: Date Analyzed:	TSCA Hazardous Waste Criteria	CS 17 03/27/14 04/03/14	CS 17A 06/02/14 06/04/14	CS 17B 06/02/14 06/05/14	CS 17C 06/02/14 06/05/14	CS 17D 06/02/14 06/04/14	CS 18 03/27/14 04/03/14	CS 19 03/27/14 04/03/14	CS 19A 06/02/14 06/05/14	CS 19B 06/02/14 06/04/14	CS 19C 06/02/14 6/4-5/2014
PCBs											
Aroclor-1016	- -	< 250	< 0.05	< 5	< 5	< 0.05	< 0.05	< 120	< 5	< 0.05	< 0.05
Aroclor-1221	- -	< 250	< 0.05	< 5	< 5	< 0.05	< 0.05	< 120	< 5	< 0.05	< 0.05
Aroclor-1232	- -	< 250	< 0.05	< 5	< 5	< 0.05	< 0.05	< 120	< 5	< 0.05	< 0.05
Aroclor-1242	- -	< 250	< 0.05	< 5	< 5	< 0.05	< 0.05	< 120	< 5	< 0.05	< 0.05
Aroclor-1248	- -	< 250	< 0.05	< 5	< 5	< 0.05	< 0.05	< 120	< 5	< 0.05	< 0.05
Aroclor-1254	- -	510	< 0.05	< 100	< 100	< 0.05	0.097	110 Jp	< 99	< 0.05	< 2.5
Aroclor-1260	- -	1,300	0.037 J	410	330	0.018 J	0.24	490	390	0.063	10
Total PCBs	50	1,810	0.037 J	410	330	0.018 J	0.337	600 Jp	390	0.063	10

TABLE 3
CONCRETE CORE PCB ANALYTICAL RESULTS (ppm)

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

Sample ID: Date Collected: Date Analyzed:	TSCA Hazardous Waste Criteria	CS 19D 06/02/14 06/04/14	CS 20 03/27/14 04/01/14	CS 21 03/28/14 03/31/14	CS 22 03/28/14 03/31/14	CS 23 03/28/14 03/31/14	CS 24 03/28/14 03/31/14	CS 25 03/28/14 04/01/14	CS 26 03/28/14 03/31/14	CS 27 03/28/14 03/31/14	CS 28 03/28/14 04/01/14
PCBs											
Aroclor-1016	- -	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05	< 0.99	< 0.05	< 0.05	< 0.05
Aroclor-1221	- -	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05	< 0.99	< 0.05	< 0.05	< 0.05
Aroclor-1232	- -	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05	< 0.99	< 0.05	< 0.05	< 0.05
Aroclor-1242	- -	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05	< 0.99	< 0.05	< 0.05	< 0.05
Aroclor-1248	- -	< 0.05	< 0.05	< 0.049	< 0.05	< 0.05	< 0.05	< 0.99	< 0.05	< 0.05	< 0.05
Aroclor-1254	- -	< 0.05	0.095	< 0.049	< 0.05	< 0.05	< 0.05	4.1	< 0.05	< 0.05	0.13
Aroclor-1260	- -	< 0.05	0.16	< 0.049	< 0.05	< 0.05	< 0.05	10	< 0.05	< 0.05	0.33
Total PCBs	50	ND	0.255	ND	ND	ND	ND	14.1	ND	ND	0.46

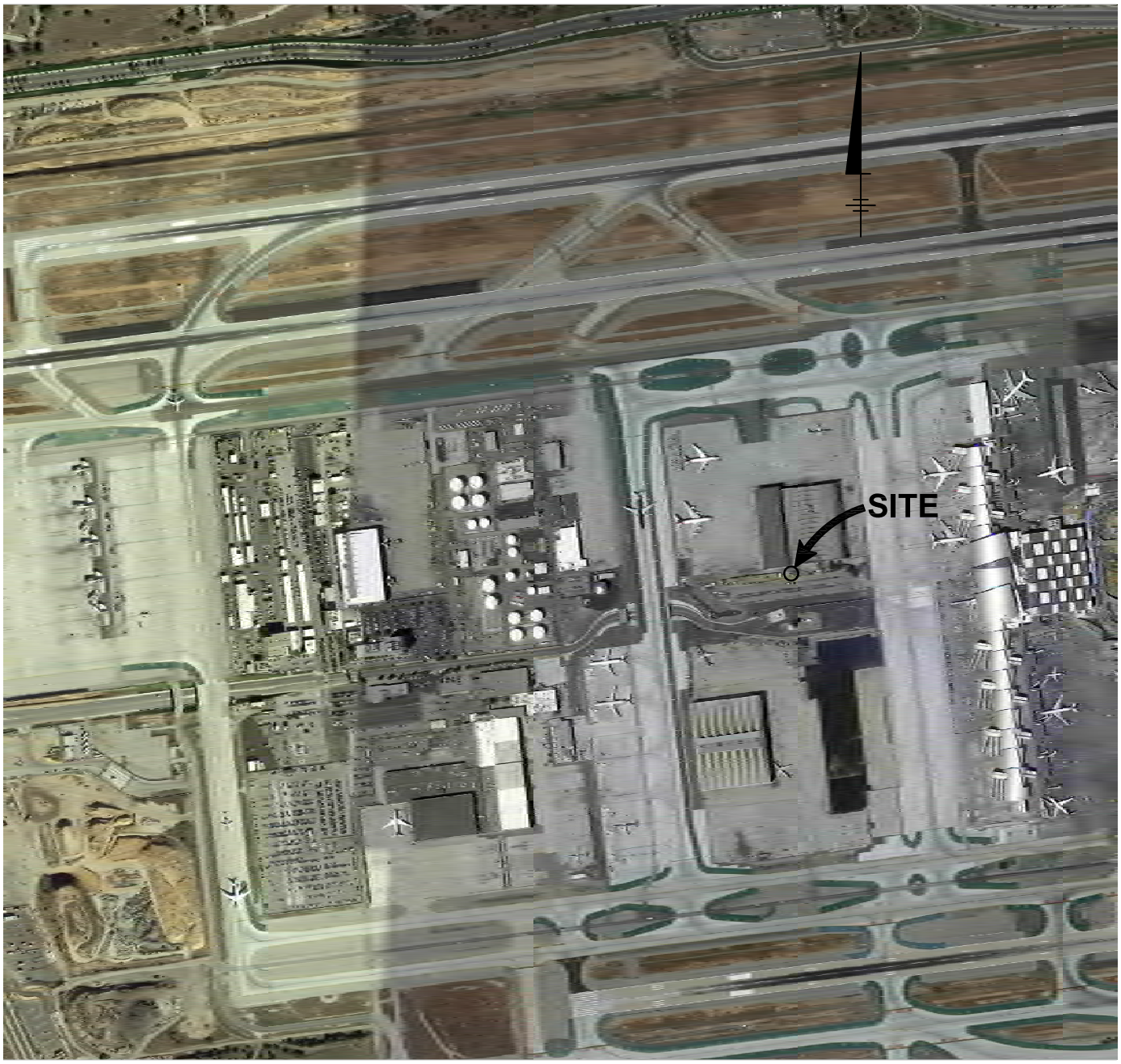
Sample ID: Date Collected: Date Analyzed:	TSCA Hazardous Waste Criteria	CS 29 03/28/14 04/01/14	CS 30 03/28/14 04/01/14
PCBs			
Aroclor-1016	- -	< 0.049	< 0.05
Aroclor-1221	- -	< 0.049	< 0.05
Aroclor-1232	- -	< 0.049	< 0.05
Aroclor-1242	- -	< 0.049	< 0.05
Aroclor-1248	- -	< 0.049	< 0.05
Aroclor-1254	- -	< 0.049	< 0.05
Aroclor-1260	- -	< 0.049	0.027 J
Total PCBs	50	ND	0.027 J

TABLE 3
CONCRETE CORE PCB ANALYTICAL RESULTS (ppm)

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

Notes:
1. Samples were collected by ARCADIS on the dates indicated.
2. PCBs = Polychlorinated biphenyls.
3. TSCA = Toxic Substances Control Act.
4. ND = Not Detected.
5. < = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
6. J = Indicates that the associated numerical value is an estimated concentration.
7. p = The % relative percent difference (RPD) between the primary and confirmation column/detector is >40%. The lower value has been reported.
8. Samples were analyzed by TestAmerica located in Irvine, California for PCBs using United States Environmental Protection Agency SW-846 Method 8082.
9. All concentrations reported in parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
10. TSCA hazardous waste criteria is from Title 40 of the Code of Federal Regulations Part 761.61(a)(5)(i)(B)(2)(iii).
11. Shading indicates that the result exceeds the TSCA PCB hazardous waste criteria.

Figures



NOTE:

1. SITE AERIAL PHOTOGRAPH ADOPTED FROM GOOGLE EARTH PRO WITH AN IMAGERY DATE OF 12.10.2013.

0 1000' 2000'

APPROXIMATE SCALE

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA

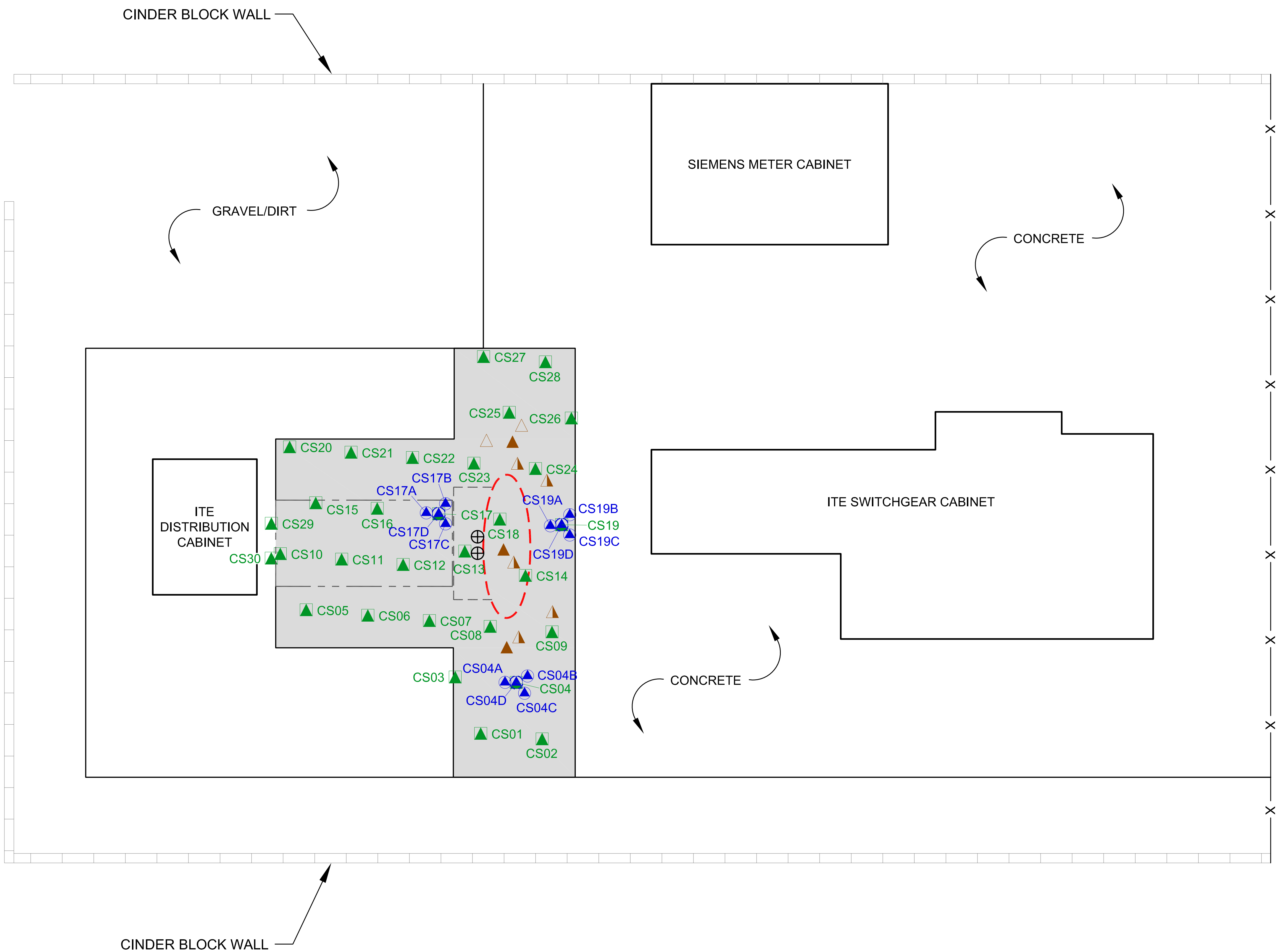
RISK-BASED CLEANUP APPROVAL REQUEST

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY:SYRACUSE, NY DIV/GROUP:ENV/IM-DV DB:A. SANCHEZ, R. ALLEN LD:(Opt) PIC:(Opt) PM:M. ASAKAWA TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENV\CAD\SYRACUSE\ACT\03961129\0000\00400\R-B-C-A-ROS\TDW\G161129N01.dwg LAYOUT: 1 SAVED: 9/24/2014 3:20 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/24/2014 3:21 PM BY: ALLEN, ROYCE
XREFS: IMAGES: PROJECTNAME: --
61129X01 039611229.0.400_1.jpg
61129XBP 039611229.0.400_2.jpg
039611229.0.400_3.jpg



LEGEND:

- CS01 — CONCRETE CORE SAMPLE LOCATION
- CS04A — CONCRETE CORE CONFIRMATION SAMPLE LOCATION
- WIPE SAMPLE COLLECTED ON OCTOBER 14, 2013
- WIPE SAMPLE COLLECTED ON OCTOBER 21, 2013
- WIPE SAMPLE COLLECTED ON NOVEMBER 20, 2013
- SCARIFICATION AREA
- APPROXIMATE SPILL BOUNDARY
- FORMER TRANSFORMER
- FORMER COMPARTMENT WALL
- INACTIVE CONDUIT
- OVERDRILL BOUNDARY
- APPROXIMATE LIMITS OF CONCRETE PAD
- X — CHAIN LINK FENCE

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE. ONLY RELEVANT EQUIPMENT IS SHOWN FOR CLARITY.
2. BASE MAP DEVELOPED FROM FIGURE PROVIDED BY AMERICAN AIRLINES IN SEPTEMBER 21, 2014 E-MAIL CORRESPONDENCE.

0 3' 6'

GRAPHIC SCALE

AMERICAN AIRLINES
LOS ANGELES INTERNATIONAL AIRPORT SITE
LOS ANGELES, CALIFORNIA
RISK-BASED CLEANUP APPROVAL REQUEST

SITE LAYOUT AND SAMPLING LOCATIONS

ARCADIS

FIGURE **2**

Attachment A

Certification Statement

Attachment A

Certification Statement in Accordance with 40CFR 761.61(a)(3)(E)

Owner: Los Angeles World Airports
Party Conducting Cleanup: American Airlines
Project: Los Angeles International Airport Site – Los Angeles, California

I, John Haney, hereby certify, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the presence, concentrations, and extent of polychlorinated biphenyl- (PCB-) impacted media at the Los Angeles International Airport Site in Los Angeles, California are on file and available for United States Environmental Protection Agency (USEPA) review at the following location:

American Airlines
Attn.: John Haney
4333 Amon Carter Boulevard MD 5285
Fort Worth, Texas 76155
Tel: 817.931.2765
John.Haney@aa.com

By: _____
John Haney, Environmental Specialist
American Airlines

Date: 11/3/14

By: _____
Robert Freeman, Airport Environmental Manager II
Los Angeles World Airports

Date: 10/31/14

Attachment B

Waste Manifests

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CAD076205053	X2	(800)535-5053	000559741WAS

GENERATOR

5. Generator's Name and Mailing Address
AMERICAN AIRLINES / JOHN CUETO
PO BOX 92246
LOS ANGELES, CA 90009-2246
(310)646-4420

Generator's Site Address (if different than mailing address)
AMERICAN AIRLINES-LAX / JOHN CUETO
7000 WORLD WAY W
LOS ANGELES, CA 90045-7503
GEN: 38989

Generator's Phone:

6. Transporter 1 Company Name: HERITAGE TRANSPORT, LLC-TS SIGNAL HILL — U.S. EPA ID Number: IND058484114

7. Transporter 2 Company Name: SEG Transport — U.S. EPA ID Number: [illegible]

8. Designated Facility Name and Site Address
U.S. ECOLOGY, INCORPORATED
HIGHWAY 95
BEATTY, NV 89003
(775)553-2203

Facility's Phone: — U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PGII, (OIL), ERG#171	10	DM	2,[illegible]	P	731		
X	2. UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PGII, (OIL, BUTYL CELLOSOLVE), ERG#171	3	DM	783	P	731		
X	3. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID, 9, PGII, (OIL, SOLVENTS, DEBRIS), ERG#171	4	DM	329	P	261		
	4. UN3432, Polychlorinated BIPHENYLS solid, 9, PGII, (oil, solvents, debris), ERG#171	1	DF	15	P			

14. Special Handling Instructions and Additional Information
1. 10702098760_T#6572277 10X55DM 2. 10702098760_T#6572303 3X55DM 3. 070209877-0_T#6572276 4X55DM 4. 070209877-0 1X30DF
ERI:INFOTRAC [404549B]GT

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Terry Strait — Signature: [signature] — Month 12 Day 23 Year 13

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Gregory Pinedo — Signature: [signature] — Month 12 Day 27 Year 13

Transporter 2 Printed/Typed Name: Kirk Lesueur — Signature: [signature] — Month 12 Day 27 Year 13

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132	H132	H132	H132

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: [illegible] — Signature: [signature] — Month 1 Day 10 Year 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: CAD076205053

22. Page: 2

23. Manifest Tracking Number: 000559741WAS

24. Generator's Name: American Airlines
P.O. Box 92346
Los Angeles, CA 90009 310-646-4420

25. Transporter 3 Company Name: Heritage transport, LLC
U.S. EPA ID Number: IND058484114

26. Transporter ____ Company Name
U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		
	Transport Only							

32. Special Handling Instructions and Additional Information

GENERATOR

TRANSPORTER

33. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Frank Howard
Signature: Frank Howard
Month: 1 Day: 9 Year: 14

34. Transporter ____ Acknowledgment of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CAD076205053	1	(800)535-5053	000591416WAS

GENERATOR

5. Generator's Name and Mailing Address
AMERICAN AIRLINES / JOHN CUETO
PO BOX 92246
LOS ANGELES, CA 90009-2246
(310)646-4420
Generator's Phone:

Generator's Site Address (if different than mailing address)
AMERICAN AIRLINES-LAX / JOHN CUETO
7000 WORLD WAY W
LOS ANGELES, CA 90045-7503
GEN: 38939

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS, LLC — U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
5736 W JEFFERSON ST
PHOENIX, AZ 85043-3633
Facility's Phone: (602)233-2955
U.S. EPA ID Number: AZ0000337360

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,UN3432,POLYCHLORINATED BIPHENYLS, SOLID,9,PGIII,(DRAINED TRANSFORMERS),ERG#171	01	CM	3070 ~~2032~~	K	~~7041~~ 261
	2.					
	3.					
	4					

14. Special Handling Instructions and Additional Information
1.REMOVED FROM SERVICE DATE: 10-7-13 1.687568_I#6654404

ERI:INFOTRAC [4113036]GT

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN CUETO — Signature: [signature] — Month: 2 Day: 10 Year: 14

INT'L

16 International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17 Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kirk P. Rebichaux — Signature: [signature] — Month: 02 Day: 10 Year: 14

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: John M. Genta — Signature: [signature] — Month: 02 Day: 11 Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CAD076205053	1	(800)535-5053	000582160WAS

GENERATOR

5. Generator's Name and Mailing Address
AMERICAN AIRLINES / JOHN CUETO
PO BOX 92246
LOS ANGELES, CA 90009-2246
(310)646-4420
Generator's Phone:

Generator's Site Address (if different than mailing address)
AMERICAN AIRLINES-LAX / JOHN CUETO
7000 WORLD WAY W
LOS ANGELES, CA 90045-7503
GEN: 38989

6. Transporter 1 Company Name: HERITAGE TRANSPORT, LLC-TS SIGNAL HILL
U.S. EPA ID Number: IND058484114

7. Transporter 2 Company Name: SLC transport
U.S. EPA ID Number: AZ1000512843

8. Designated Facility Name and Site Address
U.S. ECOLOGY, INCORPORATED
HIGHWAY 95
BEATTY, NV 89003
Facility's Phone: (775)553-2203
U.S. EPA ID Number: NVT330010000

FOLD LABEL AT DOTTE LINE. AFFIX TO RIGH SIDE OF HAZARDOU MATERIAL BILLS SO THA TAB STICKS OUT.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID, 9, PGII, (OIL, SOLVENTS, DEBRIS), ERG#171	1	DM	25 58	KG P	261
	2.			JH 3-21-14		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.070209877-0_T#6782605
1x55
ERI:INFOTRAC [4249687]GT

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Terry Strait
Signature: Terry Strait
Month Day Year: 3 20 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. ☑ Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JOSE HERNANDEZ
Signature:
Month Day Year: 3 20 14
Transporter 2 Printed/Typed Name: Kirk RESHeul
Signature:
Month Day Year: 3 27 14

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name:
Signature:
Month Day Year: 4 7 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CAD076205053	1	(800)535-5053	000586766WAS

GENERATOR

5. Generator's Name and Mailing Address
AMERICAN AIRLINES / JOHN CUETO
PO BOX 92246
LOS ANGELES, CA 90009-2246
(310)646-4420
Generator's Phone:

Generator's Site Address (if different than mailing address)
AMERICAN AIRLINES-LAX / JOHN CUETO
7000 WORLD WAY W
LOS ANGELES, CA 90045-7503
GEN: 38989

6. Transporter 1 Company Name
HERITAGE TRANSPORT, LLC-TS SIGNAL HILL
U.S. EPA ID Number
IND058484114

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
U.S. ECOLOGY, INCORPORATED
HIGHWAY 95
BEATTY, NV 89003
Facility's Phone: (775)553-2203
U.S. EPA ID Number
NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN2315,POLYCHLORINATED BIPHENYLS, LIQUID, 9,PGII, (OIL, BUTYL CELLOSOLVE),ERG#171	1	DM	11	K	731
X	2. RQ,UN3432,POLYCHLORINATED BIPHENYLS, SOLID,9,PGII,(OIL, SOLVENTS, DEBRIS),ERG#171	6	DM	476	K	261
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. 10702098760_T#6902059 2. 070209877-0_T#6902060
1 X 30 6 X 55
ERI:INFOTRAC [4319303]6T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Terry Strait
Signature: Terry Strait
Month: 4 Day: 18 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Adrian Samarripa
Signature:
Month: 4 Day: 18 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132	H132		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Dennis Buccellato
Signature:
Month: 5 Day: 7 Year: 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAD076205053
2. Page 1 of 1
3. Emergency Response Phone: (800)535-5053
4. Manifest Tracking Number: 000587156WAS

5. Generator's Name and Mailing Address: / JOHN CUETO
PO BOX 92246
LOS ANGELES, CA 90009-2246
(310)646-4420

Generator's Site Address (if different than mailing address) JOHN CUETO
7000 WORLD WAY W
LOS ANGELES, CA 90045-7503
GEN: 38989

Generator's Phone:

6. Transporter 1 Company Name: HERITAGE TRANSPORT, LLC-TS SIGNAL HILL — U.S. EPA ID Number: IND058484114

7. Transporter 2 Company Name: S.R.F. TRANSPORT — U.S. EPA ID Number: AZR000512343

8. Designated Facility Name and Site Address: U.S. ECOLOGY, INCORPORATED
HIGHWAY 95
BEATTY, NV 89003
(775)553-2203
U.S. EPA ID Number: NVT330010000

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,UN3432,POLYCHLORINATED BIPHENYLS, SOLID,9,PGII,(OIL, SOLVENTS, DEBRIS),ERG#171	~~5~~ 1	~~DF~~ DM GP6-27-14	~~3,660~~ 3,100	P	261
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.070209877-0_1#7109089
1X55DM ~~1X200DF~~ GP6-27-14
ERI:INFOTRAC [449211&]GT

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Terry Strait — Signature: [signature] — Month 6 Day 27 Year 14

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: ____
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Gerson Prieto — Signature: [signature] — Month 6 Day 27 Year 14
Transporter 2 Printed/Typed Name: Stephen Goze — Signature: [signature] — Month 7 Day 7 Year 14

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: KYLE CATHCART — Signature: [signature] — Month 8 Day 12 Year 14

GENERATOR · INT'L · TRANSPORTER · DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Attachment C

Diamond Novolac System

SYSTEM DESCRIPTION:

Diamond-Novolac™ System

DiamondStone Diamond-Eprime™: Diamond-Eprime has excellent penetration and bond strength to the concrete substrate. Diamond-Eprime also has increased moisture tolerance, as compared with standard epoxies.
DiamondStone Diamond-Novolac: Diamond-Novolac is a multifunctional polymer coating formulated to provide maximum chemical resistance to concentrated (98%) sulfuric acid, as well as other aggressive chemicals. Diamond-Novolac combines micro-fillers and Diamond-Novolac resin with a special stress-relieving additive to create a durable, chemical-resistant surface.

PREPARATION & INSTALLATION PROCEDURES:

Diamond-Novolac System

1. Shot-blast or diamond-grind the entire area to prep floor.
2 Diamond-grind all edges, around columns and all areas that are not accessible with the large blasting equipment.
3. Patch floor using DiamondStone Epoxy Patch.
4. Cut in perimeter and all edges bordering equipment.
5. Apply a notched squeegee coat of DiamondStone Diamond-Novolac 100% solids epoxy. Color to be chosen from manufacturer's standard color chart.
6. Broadcast #3 grit aluminum oxide into floor.
7. Backroll floor for consistency.
8. Saw cut and fill joints using DiamondStone Diamond-PJF

DIAMONDSTONE®

888-817-8663

DIAMOND-EPRIME®

DESCRIPTION:

DIAMOND-EPRIME is a high-performance, low-viscosity epoxy primer engineered with stress-relieving flexibility. This material is a 100% solids low-odor formulation with superior moisture tolerance over standard epoxies.

BENEFITS:

- **Moisture tolerant**
- **100% solids; no VOCs**
- **Low-odor formula**
- **Engineered with stress-relieving flexibility**
- **Low viscosity; fast-curing**
- **Provides excellent adhesion to concrete**
- **Blush-free formulation**
- **Qualified LEED® product**

RECOMMENDED USES:

Diamond-Eprime should be used in conjunction with DiamondStone® epoxy flooring systems.

SURFACE PREPARATION:

Apply only to clean and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants. Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed. Remove any laitance or weak surface layers. Concrete should have a minimum surface tensile strength of 300 psi. Prepare surface by mechanical means to achieve a profile equal to industry standards. Moisture testing of the concrete surface should be performed pursuant to ASTM E-1907 moisture testing specification. See DiamondStone Concrete Moisture Limits & Testing Policy for project-specific testing requirements and, if necessary, moisture-tolerant options. Bare concrete should be tested for pH and exhibit a pH between 7 and 11. NOTE: Although testing is critical, it is not a guarantee that future challenges will not arise. All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application. Outgassing may occur due to the porosity of some concrete surfaces. Refer to DiamondStone Surface Preparation Guidelines for more details.

TYPICAL PROPERTIES:

Bond Strength (ASTM D-4541).....350 psi

Pot Life at 77° F .....20 mins

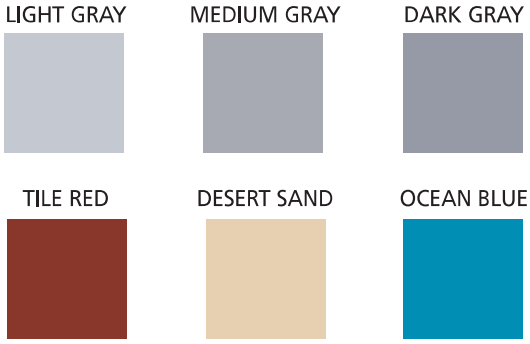
Set Time at 77° F.....4 hrs

The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

PRECAUTIONS:

Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.

STANDARD COLORS:



The above colors are available with the addition of epoxy color packs. Additional colors are available upon request.

LIMITATIONS:

Do not apply when concrete temperatures are less than 50° F or greater than 95° F. (Material cures slower at cooler temperatures, and working time will be substantially reduced at higher temperatures.) All components should be stored in a dry place at temperatures between 65° F and 85° F. Confirm product performance in specific chemical environment prior to use. Substrate temperature must be at least 5° F above the dew point. Actual color may vary slightly upon application.

SHELF LIFE: 6 months at 77° F

WARRANTY INFORMATION:

DiamondStone, LLC warrants its products to be free from defects in material and workmanship. DiamondStone, LLC's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at DiamondStone, LLC's option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by Buyer to DiamondStone, LLC in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one (1) year from the delivery date, whichever is earlier. Buyer's failure to notify DiamondStone, LLC of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

This Limited Warranty is exclusive and in lieu of all other warranties of any kind or nature whatsoever. DiamondStone, LLC makes no other warranties concerning this product. No other warranties, whether expressed, implied or statutory, shall apply. All other warranties, including, but not limited to, implied warranties of good performance, merchantability and fitness for particular purpose are hereby excluded and disclaimed. In no event shall DiamondStone, LLC be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by DiamondStone, LLC, whether in its technical literature, in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. DiamondStone, LLC cannot guarantee that color will conform to sample, if provided.

DIAMONDSTONE

DIAMONDSTONE®

888-817-8663

DIAMOND-NOVOLAC®

DESCRIPTION:

DIAMOND-NOVOLAC is a multifunctional polymer coating formulated to provide maximum chemical resistance to 98% sulfuric acid and other aggressive chemicals. Diamond-Novolac provides excellent durability, due in part to the microfibers incorporated into the resin that act as stress relievers, enabling the floor to relax after an incident.

BENEFITS:

- **Moisture tolerant***
- **Optional Non-Sacrificial Anti-Microbial® additive**
- **100% solids; no VOCs**
- **Excellent impact resistance**
- **Excellent abrasion resistance**
- **Stress-relieving additive avoids age-cracking**
- **Resists aggressive acids, including 98% sulfuric**
- **No extending fillers or diluents**
- **Seamless, monolithic application**
- **Qualified LEED® product**

*When used in conjunction with a DiamondStone® moisture-control product

RECOMMENDED USES:

Diamond-Novolac is ideal for use in chemical process areas, secondary containment, and truck loading/unloading areas. Diamond-Novolac is also recommended for coating pump pads, pedestals, curbs, dike walls, and battery-charging areas. Diamond-Novolac provides excellent thermal compatibility with concrete.

TYPICAL PROPERTIES:

Compressive Strength (ASTM C-579)	20,000 psi
Tensile Strength (ASTM C-307)	4,000 psi
Flexural Strength (ASTM C-580)	4,300 psi
Bond Strength (ASTM D-4541)	425 psi
Abrasion Resistance (ASTM D-4060)	70 mg
Pot Life at 77° F	30 mins
Foot Traffic at 77° F	16 hrs
Full Service at 77° F	5–7 days

The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

STANDARD COLORS:

DARK GRAY

TILE RED

Additional colors are available upon request.

ADDITIONAL SLIP RESISTANCE AVAILABLE:

OX-Grit 30

Medium .....8–10 lbs/1,000 square foot

Heavy .....10–15 lbs/1,000 square foot

SURFACE PREPARATION:

Apply only to clean and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants. New concrete should be cured a minimum of 28 days. Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed. Remove any laitance or weak surface layers. Concrete should have a minimum surface tensile strength of 300 psi. Prepare surface by mechanical means to achieve a profile equal to industry standards. Moisture testing of the concrete surface should be performed pursuant to ASTM E-1907 moisture testing specification. See DiamondStone Concrete Moisture Limits & Testing Policy for project-specific testing requirements and, if necessary, moisture-tolerant options. Bare concrete should be tested for pH and exhibit a pH between 7 and 11. NOTE: Although testing is critical, it is not a guarantee that future challenges will not arise. All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application. Outgassing may occur due to the porosity of some concrete surfaces. Refer to DiamondStone Surface Preparation Guidelines for more details.

SHELF LIFE: 6 months at 77° F

PRECAUTIONS:

Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions. Do not thin with solvents without consulting your DiamondStone technical sales representative.

LIMITATIONS:

Do not apply when concrete temperatures are less than 50° F or greater than 95° F. (Material cures slower at cooler temperatures, and working time will be substantially reduced at higher temperatures.) All components should be stored in a dry place at temperatures between 45° F and 85° F. Confirm product performance in specific chemical environment prior to use. Substrate temperature must be at least 5° F above the dew point. Please take this into consideration. Actual color may vary slightly upon application. Product will amber from UV lighting. Certain acids will also discolor the floor. DiamondStone recommends the color Tile Red to minimize these effects.

CHEMICAL RESISTANCE:

See Chemical Resistance Guide for all DiamondStone products.

CLEANING AND MAINTENANCE:

Refer to DiamondStone cleaning and maintenance instructions.

WARRANTY INFORMATION:

DiamondStone, LLC warrants its products to be free from defects in material and workmanship. DiamondStone, LLC's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at DiamondStone, LLC's option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by Buyer to DiamondStone, LLC in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one (1) year from the delivery date, whichever is earlier. Buyer's failure to notify DiamondStone, LLC of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

This Limited Warranty is exclusive and in lieu of all other warranties of any kind or nature whatsoever. DiamondStone, LLC makes no other warranties concerning this product. No other warranties, whether expressed, implied or statutory, shall apply. All other warranties, including, but not limited to, implied warranties of good performance, merchantability and fitness for particular purpose are hereby excluded and disclaimed. In no event shall DiamondStone, LLC be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by DiamondStone, LLC, whether in its technical literature, in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. DiamondStone, LLC cannot guarantee that color will conform to sample, if provided.

DIAMONDSTONE

MSDS
MATERIAL SAFETY DATA SHEET
Prepared according to 29 CFR 1910.1200
DATE REVISED: November 2007

DIAMONDSTONE

888-81-STONE
(888-817-8663)

PRODUCT NAME: **DiamondStone® Diamond-Novolac™**
100% Solids
Part A

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME: **DiamondStone, LLC**
316 S. Price Road, Suite 1, Tempe, Arizona 85281
TELEPHONE: **888-81-STONE**
EMERGENCY PHONE NO: **(CHEMTREC) 800-424-9300**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.
All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION II - HAZARDOUS INGREDIENTS

Not applicable. All raw materials are TOSCA listed.

SECTION III - PHYSICAL DATA

BOILING POINT:	N/D	SPECIFIC GRAVITY: 1.24
VAPOR PRESSURE:	N/D	EVAPORATION RATE: Slower than ether
SOLUBILITY IN WATER:	Negligible	APPEARANCE: Viscous gray or tile red liquid

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: > 200º C METHOD USED: Setaflash

FLAMMABLE LIMITS IN AIR BY VOLUME: Lower: N/A Upper: N/A

EXTINGUISHING MEDIA: CO_2, dry chemical, water fog,

SPECIAL FIRE FIGHTING PROCEDURES & UNUSUAL HAZARDS: Wear NIOSH/MSHA approved respirators for fighting fires. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots). Material will not burn unless preheated. Cool fire exposed containers with water.

SECTION V - REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizers, strong lewis or mineral acids, and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reactions with some curing agents may produce considerable heat.

HAZARDOUS DECOMPOSITION PRODUCTS: Emits unknown toxic combustion products

HAZARDOUS POLYMERIZATION: Will not occur. Avoid uncontrolled reactions with epoxy products.

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation, skin, or eye contact.

Effects of Overexposure

SKIN CONTACT: Will cause irritation.

SKIN ABSORPTION: This product may cause mild to moderate skin irritation and possibly skin sensitization.

EYES: This product is presumed to be moderately irritating to the eyes.

INGESTION: This product is considered to have a low order of acute oral toxicity.

INHALATION: May be irritating to the nose, throat and respiratory tract.

CHRONIC: Irritations may be evident as noted above. Skin sensitization (allergy) may be evidenced by rashes, especially hives.

SECTION VII - FIRST AID

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

EYES: Flush with cool water for at least 15 minutes. Call a physician.

SKIN: Wash thoroughly with soap and water. Discard contaminated clothing. Call a physician if necessary.

INGESTION: Call a physician. Do not induce vomiting. Never give anything by mouth to an unconscious person.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

HMIS RATING: G

VENTILATION: Local exhaust is recommended.

PERSONAL PROTECTIVE EQUIPMENT: Protective gloves and safety glasses should be worn. Eye wash facility and safety shower recommended. For fire conditions, wear full protective clothing, including self-contained breathing apparatus. For unventilated, confined areas, wear NIOSH/MSHA approved respirators.

SECTION IX - ENVIRONMENTAL AND DISPOSAL INFORMATION

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up with absorbent material and remove to closed container. Wash area with mild detergent and water.

WASTE DISPOSAL METHOD: Handle disposal of waste material in manner which complies with local, state, province and federal regulations.

SECTION X - ADDITIONAL INFORMATION

SHIPPING INFORMATION: Polymer Compound, not regulated by DOT

STORAGE RECOMMENDATION: Protect from freezing. Store in a cool dry place with adequate ventilation. Keep away from open flames and high temperatures.

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult DiamondStone® for further information.

DIAMONDSTONE LLC, CORPORATE HEADQUARTERS

316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

MSDS

MATERIAL SAFETY DATA SHEET
Prepared according to 29 CFR 1910.1200
DATE REVISED: October 2006

DIAMONDSTONE

888-81-STONE
(888-817-8663)

PRODUCT NAME: **DiamondStone® Diamond-Eprime™**
Part B - (Hardener)

CHEMICAL: **Amine Curing Agent (Trade Secret)**

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME: **DiamondStone, LLC**
316 S. Price Road, Suite 1, Tempe, Arizona 85281
TELEPHONE: **888-81-STONE**
EMERGENCY PHONE NO: **(CHEMTREC) 800-424-9300**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.
All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION II - HAZARDOUS INGREDIENTS

COMMON NAME	CAS-NO.	APPROX. WEIGHT %
PROPRIETARY RESIN		30 - 35
PROPRIETARY ADDITIVE		15 - 20
PROPRIETARY RESIN		15 - 20
PROPRIETARY ADDITIVE		5 - 10
PROPRIETARY RESIN		5 - 10
PROPRIETARY INGREDIENT		5 - 10
PROPRIETARY ADDITIVE		5 - 10

SECTION III - PHYSICAL DATA

Odor: Normal for this product type.
Physical State: Liquid
pH: Not determined.
Vapor pressure: 20 mmHG @ 68º F (20º C)
Vapor density (air = 1.0): 5.1
Boiling point: 392º F (200º C)
Solubility in water: Slightly Soluble
Coefficient of water/oil distribution: Not determined.
Density (lbs per US gallon): 8.13
Specific gravity (water = 1): .97
Evaporation rate (butyl acetate = 1.0): Not determined.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point (Fahrenheit): 200º F (93º C) TCC/PM
Lower explosive limit: Not available.
Upper explosive limit: Not available.
Autoignition temperature: Not available.
Sensitivity to impact: No.
Sensitivity to static discharge: Sensitivity to static discharge is not expected.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam and/or water fog.
FIRE FIGHTING PROCEDURES: Use water spray to cool nearby containers and structures exposed to fire.

SECTION V - REACTIVITY DATA

STABILITY: This product is stable.
CONDITIONS TO AVOID: None known.
INCOMPATIBILITY: Strong oxidizers.
HAZARDOUS POLYMERIZATION: None anticipated.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide. Phenolics. Ammonia compounds. Nitrogen compounds.
SENSITIVITY TO STATIC DISCHARGE: Sensitivity to static discharge is not expected.

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation; Ingestion; Skin absorption
This product contains ingredients that may contribute to the following potential acute health effects:
INHALATION EFFECTS: May cause corrosive burns to respiratory passages.
EYE CONTACT: Causes Blindness
SKIN CONTACT: May be fatal if absorbed through the skin.
ACUTE INGESTION: May be fatal if swallowed.
OTHER EFFECTS: Contains ingredients which are corrosive.
THIS PRODUCT CONTAINS INGREDIENTS THAT MAY CONTRIBUTE TO THE FOLLOWING POTENTIAL CHRONIC HEALTH EFFECTS: Overexposure may cause allergic respiratory reaction. This product contains ingredients which may produce an allergic respiratory response. Treat as a respiratory sensitizer. Effects may be permanent.May cause eye damage and pain. Contains a component which is a known or suspected skin sensitizer. May cause redness and blistering of skin.May cause liver damage. May cause kidney damage. Possible sensitization.

SECTION VII - FIRST AID

INHALATION: If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention. Do not do mouth-to-mouth resuscitation. Contact a physician immediately. Move person to fresh air. If breathing is difficult, give oxygen.
EYE CONTACT: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing. If irritation persists, consult a physician. Flush with plenty of low pressure water for 15 minutes, occasionally lifting eye lids.
SKIN CONTACT: Remove contaminated shoes and discard. Remove contaminated clothing and launder before reuse. In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.
INGESTION: If swallowed, get medical attention immediately. If swallowed , do not induce vomiting. Give large quantities of water. If available, give several glasses of milk. Never give anything by mouth to an unconscious person. Get medical attention immediately. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention. If swallowed, DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any respiratory or skin condition.

DIAMONDSTONE LLC, CORPORATE HEADQUARTERS
316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

SECTION VIII - SPECIAL PROTECTION INFORMATION:

EYE AND FACE PROTECTION: Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.
SKIN PROTECTION: Gloves– Neoprene or other nonporous. Neoprene or plastic apron and protective clothing covering exposed skin areas.
RESPIRATORY PROTECTION: If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions. Ventilation is required when spraying or applying in confined area. Ventilation equipment should be explosion proof.
EXPOSURE GUIDELINES: OSHA Permissible Exposure Limits (PEL's) ACGIH Threshold Limit Value (TLV's)

SECTION IX - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, and flames. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.

SECTION X - TRANSPORTATION AND ADDITIONAL INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
Proper Shipping Name: PAINT Hazard Class: 8 UN ID Number: UN3066 Packing Group: II

49 CFR Hazardous Material Regulations Parts 100-180 The supplier will apply the combustible liquid exception in 49 CFR 173.150(f), limited quantity or "does not sustain combustion" exceptions and consumer commodity rules, when authorized. Please check 49 CFR Parts 100-180 to determine if the use of these exceptions applies to your shipments when re-shipping our products.

INTERNATIONAL AIR TRANSPORT ASSOCIATION:
Proper Shipping Name: PAINT Hazard Class: 8 UN ID Number: UN3066 Packing Group: II

INTERNATIONAL MARITIME ORGANIZATION:
Proper Shipping Name: PAINT Hazard Class: 8 UN ID Number: UN3066 Packing Group: II

SECTION XI - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: SARA 311/312 Hazard Class:

Acute: Yes	Reactivity: No
Chronic: Yes	Sudden Pressure: No
Flammability: No	

U.S. STATE REGULATIONS: Pennsylvania Right To Know:

PROPRIETARY ADDITIVE	Trade Secret
PROPRIETARY ADDITIVE	Trade Secret
PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret
PROPRIETARY INGREDIENT	Trade Secret
PROPRIETARY ADDITIVE	Trade Secret
PROPRIETARY RESIN	Trade Secret

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult DiamondStone® for further information.

316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

MSDS

MATERIAL SAFETY DATA SHEET
Prepared according to 29 CFR 1910.1200
DATE REVISED: October 2006

DIAMONDSTONE

888-81-STONE
(888-817-8663)

PRODUCT NAME: **DiamondStone® Diamond-Eprime™**
Part A - (Resin)

CHEMICAL: **Proprietary Resin (Trade Secret)**

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME: **DiamondStone, LLC**
316 S. Price Road, Suite 1, Tempe, Arizona 85281
TELEPHONE: **888-81-STONE**
EMERGENCY PHONE NO: **(CHEMTREC) 800-424-9300**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.
All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION II - HAZARDOUS INGREDIENTS

COMMON NAME	CAS-NO.	APPROX. WEIGHT %
PROPRIETARY RESIN		75 - 80
PROPRIETARY RESIN		10 - 15
PROPRIETARY ADDITIVE		5 - 10
BENZYL ALCOHOL	100-51-6	1 - 5

SECTION III - PHYSICAL DATA

Odor: Normal for this product type.
Physical State: Liquid
pH: Not determined.
Vapor pressure: 1 mmHG @ 68º F (20º C)
Vapor density (air = 1.0): 3.7
Boiling point: 400º F (204º C)
Solubility in water: Insoluble.
Coefficient of water/oil distribution: Not determined.
Density (lbs per US gallon): 9.12
Specific Gravity 1.09
Evaporation rate (butyl acetate = 1.0): Not determined.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point (Fahrenheit): 200º F (93º C) TCC/PM
Lower explosive limit: Not available.
Upper explosive limit: Not available.
Autoignition temperature: Not available.
Sensitivity to impact: No.
Sensitivity to static discharge: Sensitivity to static discharge is not expected.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam and/or water fog.
FIRE FIGHTING PROCEDURES: Use water spray to cool nearby containers and structures exposed to fire.

DIAMONDSTONE LLC, CORPORATE HEADQUARTERS
316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

SECTION V - REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: None known.
INCOMPATIBILITY: None known.
HAZARDOUS POLYMERIZATION: None anticipated.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.
SENSITIVITY TO STATIC DISCHARGE: Sensitivity to static discharge is not expected.

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation; Ingestion; Skin absorption
EMERGENCY OVERVIEW: This product contains ingredients that may contribute to the following potential acute health effects:
INHALATION EFFECTS: May cause respiratory tract sensitization.
EYE CONTACT: Corneal Injury/eye damage. May cause eye burns.
SKIN CONTACT: Contains a component which is a known or suspected skin sensitizer. May cause skin burns.
ACUTE INGESTION: May be fatal if swallowed.
OTHER EFFECTS: None known
THIS PRODUCT CONTAINS INGREDIENTS THAT MAY CONTRIBUTE TO THE FOLLOWING POTENTIAL
CHRONIC HEALTH EFFECTS: May cause eye damage and pain. Possible sensitization.

SECTION VII - FIRST AID

INHALATION: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention. If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention.
EYE CONTACT: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
SKIN CONTACT: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention. Remove contaminated clothing and launder before reuse. Remove contaminated shoes and discard.
INGESTION: If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If swallowed, get medical attention immediately.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any respiratory or skin condition.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

EYE AND FACE PROTECTION: Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.
SKIN PROTECTION: Gloves– Neoprene or other nonporous. Neoprene or plastic apron and protective clothing covering exposed skin areas.
RESPIRATORY PROTECTION: If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions. Ventilation is required when spraying or applying in confined area. Ventilation equipment should be explosion proof.
EXPOSURE GUIDELINES: OSHA Permissible Exposure Limits (PEL's) ACGIH Threshold Limit Value (TLV's)

DIAMONDSTONE LLC, CORPORATE HEADQUARTERS
316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

SECTION IX - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, and flames. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.

SECTION X - TRANSPORTATION AND ADDITIONAL INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

Proper Shipping Name: PAINT, NOT REGULATED UN ID Number: NRPAIN

49 CFR Hazardous Material Regulations Parts 100-180

The supplier will apply the combustible liquid exception in 49 CFR 173.150(f), limited quantity or "does not sustain combustion" exceptions and consumer commodity rules, when authorized. Please check 49 CFR Parts 100-180 to determine if the use of these exceptions applies to your shipments when re-shipping our products.

INTERNATIONAL AIR TRANSPORT ASSOCIATION:

Proper Shipping Name: PAINT, NOT REGULATED UN ID Number: NRPAIN

INTERNATIONAL MARITIME ORGANIZATION:

Proper Shipping Name: PAINT, NOT REGULATED UN ID Number: NRPAIN

SECTION XI - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: SARA 311/312 Hazard Class:

Acute: Yes	Reactivity: No
Chronic: Yes	Sudden Pressure: No
Flammability: No	

U.S. STATE REGULATIONS: Pennsylvania Right To Know:

BENZYL ALCOHOL	100-51-6
PROPRIETARY RESIN	Trade Secret
PROPRIETARY ADDITIVE	Trade Secret
PROPRIETARY RESIN	Trade Secret

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult DiamondStone® for further information.

316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

MSDS
MATERIAL SAFETY DATA SHEET
Prepared according to 29 CFR 1910.1200
DATE REVISED: November 2007

DIAMONDSTONE

888-81-STONE
(888-817-8663)

PRODUCT NAME: **DiamondStone® Diamond-Novolac™**
100% Solids
Part B

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME: **DiamondStone, LLC**
316 S. Price Road, Suite 1, Tempe, Arizona 85281
TELEPHONE: **888-81-STONE**
EMERGENCY PHONE NO: **(CHEMTREC) 800-424-9300**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard.
All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION II - HAZARDOUS INGREDIENTS

COMPONENTS	CAS NO.	TLV	STEL	PEL	CONTENT
Triethylenetetramine	122-24-3	Not estab.	Not estab.	Not estab.	10-30%
LD 50/LC 50: 2500 mg/kg (oral rat)					
Benzyl Alcohol	100-51-6	Not estab.	Not estab.	Not estab.	1-10%
LD/50/LC 50: 1230 mg/kg (oral rat)					
All raw materials are TOSCA listed					

SECTION III - PHYSICAL DATA

BOILING POINT:	Not determined	WATER/OIL DISTRIBUTION COEFFICIENT: Not det.
PERCENT VOLATILE:	<5%	SOLUBILITY IN WATER: Slight
VAPOR PRESSURE:	Not determined	FREEZING POINT: Not determined
VAPOR DENSITY:	>Air	SPECIFIC GRAVITY: 1.03
ODOR THRESHOLD:	Not determined	pH: >10
APPEARANCE:	Amber liquid	EVAPORATION RATE: <1 (ether = 1)
ODOR:	Amine odor	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 98º C, 208º F METHOD USED: Pensky Martin Closed Cup
AUTO-IGNITION TEMPERATURE: Not determined LEL: Not determined UEL: Not determined
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam or vaporizing liquid type of extinguishing media
SPECIAL FIRE FIGHTING PROCEDURES & UNUSUAL HAZARDS: None

SECTION V - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY: Strong mineral acids
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, nitrogen and ammonia
HAZARDOUS POLYMERIZATION: Will not occur

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Dermal

Effects of Overexposure

SKIN CONTACT: Prolonged or repeated exposure may cause skin irritation, even a burn.

SKIN ABSORPTION: Material can be absorbed through the skin.

EYES: Contact may cause severe irritation with corneal injury

INGESTION: Ingestion can cause burns of mouth and throat, abdominal pain, muscular weakness and convulsions.

INHALATION: High concentrations of vapors can cause irritation of eyes and respiratory tract.

CHRONIC: None known. Materials are not carcinogenic, mutagenic or teratogenic.

SECTION VII - FIRST AID

INHALATION: Remove individual to fresh air.

EYES: Flush with large quantities of water for at least 15 minutes; seek immediate medical attention.

SKIN: Wash with soap and water; get medical attention if exposure is extensive; remove clothing and wash before reuse.

INGESTION: Do not induce vomiting; give large quantities of water and at least one ounce of vinegar in water; get immediate medical attention. Do not give anything by mouth to an unconscious person.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

VENTILATION: Good general ventilation should be sufficient to keep odors at comfort level.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses or splash goggles; impervious gloves.

SECTION IX - ENVIRONMENTAL AND DISPOSAL INFORMATION

ACTION TO TAKE FOR SPILLS/LEAKS: Wipe up or absorb on suitable material and shovel up.

WASTE DISPOSAL METHOD: Handle disposal of waste material in manner which complies with local, state, province and federal regulations. Liquid incineration or approved chemical disposal area, as per regulations.

SECTION X - ADDITIONAL INFORMATION

SHIPPING INFORMATION: Polymer Compound, not regulated by DOT

STORAGE RECOMMENDATION: Store in a cool dry place with adequate ventilation.

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult DiamondStone® for further information.

DIAMONDSTONE LLC, CORPORATE HEADQUARTERS

316 South Price Road, Suite 1 • Tempe, Arizona 85281 • 888-81-STONE (888-817-8663) • www.diamondstoneproducts.com

Zep Commercial Sales & Service
A unit of Zep Inc.
1310 Seaboard Industrial Blvd.
Atlanta, GA 30318
1-888-805-HELP (4357)
www.zepcommercial.com

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name Industrial Purple Cleaner and Degreaser Concentrate

Product code ZU0856

Date of issue 03/12/10 **Supersedes** 10/04/07

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 404-352-1680

For Medical Emergency
(877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency
CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared By
Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

*Hazard Determination System (HDS): Health, Flammability, Reactivity

DANGER !

CAUSES EYE AND SKIN BURNS. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. HARMFUL OR FATAL IF SWALLOWED.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects **Routes of Entry** Dermal contact. Eye contact. Inhalation.

Eyes Causes eye burns. Eye exposure may cause severe and permanent eye injury (blindness).

Skin Causes skin burns. Harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

Inhalation Avoid breathing vapors, spray or mists. Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion Harmful if swallowed. May cause burns to mouth, throat and stomach.

Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

Carcinogenicity No known significant effects or critical hazards.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
SODIUM HYDROXIDE; caustic soda; soda lye	1310-73-2	1 - 10
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1 - 5
SODIUM XYLENE SULFONATE	1300-72-7	1 - 5
SODIUM DODECYLBENZENE SULFONATE; linear alkyl aryl sodium sulfonate; Sodium DDBSA	25155-30-0	1 - 5
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	<3
ALCOHOLS, C9-11, ETHOXYLATED; linear primary alcohol ethoxylate	68439-46-3	<3

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

Skin Contact Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)

Flash Point Closed cup: >93.3°C (>199.9°F)

Flammable Limits Not applicable

Flammability Non-combustible.

Fire hazard In a fire or if heated, a pressure increase will occur and the container may burst. May emit toxic fumes under fire conditions.

Fire-Fighting Procedures Use an extinguishing agent suitable for the surrounding fire. Do not release runoff from fire to drains or watercourses.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

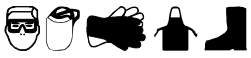
Handling Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Use with adequate ventilation. Do not ingest. Do not reuse container. Wash thoroughly after handling. Observe label precautions.

Storage Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
SODIUM HYDROXIDE; caustic soda; soda lye	**ACGIH / OSHA (United States).** CEIL: 2 mg/m³ **NIOSH REL (United States). Absorbed through skin.** TWA: 5 ppm 10 hour(s). TWA: 24 mg/m³ 10 hour(s). **ACGIH TLV (United States, 1/2009).** TWA: 20 ppm 8 hour(s). **OSHA PEL (United States, 11/2006). Absorbed through skin.** TWA: 50 ppm 8 hour(s). TWA: 240 mg/m³ 8 hour(s).
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	

Personal Protective Equipment (PPE)



Eyes Splash goggles. Face shield.

Body Wear appropriate protective clothing to prevent skin contact. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves. Synthetic apron. Chemical resistant boots.

Respiratory Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State Liquid.
pH 13.0 - 14.0
Boiling Point 98.9°C (210°F)
Specific Gravity 1.06
Solubility Easily soluble in the following materials: cold water and hot water.

Color Clear. Purple.
Odor Mild. Ethereal.
Vapor Pressure Not determined.
Vapor Density >1 [Air = 1]
Evaporation Rate 1 (Water = 1)

VOC (Consumer) 42 (g/l). 0.35 lbs/gal (3.98%)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.
Incompatibility Reactive or incompatible with the following materials: oxidizing materials, metals and acids.
Hazardous Polymerization Will not occur.
Hazardous Decomposition Products carbon oxides (CO, CO_2)

Section 11. Toxicological Information

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Hydroxide	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	500 mg/kg	-
Ethylene Glycol Monobutyl Ether	LD50 Dermal	Guinea pig	>2000 mg/kg	-
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Intraperitoneal	Rat	220 mg/kg	-
	LD50 Intravenous	Rat	307 mg/kg	-
	LD50 Oral	Guinea pig	1200 mg/kg	-
	LD50 Oral	Rat	917 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
	LD50 Unreported	Rat	917 mg/kg	-
	LDLo Oral	Rat	1500 mg/kg	-
	TDLo Oral	Rat	500 mg/kg	-
	TDLo Unreported	Rat	250 mg/kg	-
	LC50 Inhalation Vapor	Rat	2900 mg/m3	7 hours
	LC50 Inhalation Vapor	Guinea pig	>633 ppm	1 hours
	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
Sodium Dodecylbenzene Sulfonate	LD50 Oral	Mouse	2000 mg/kg	-
	LD50 Oral	Rat	1260 mg/kg	-
Diethylene Glycol Monobutyl Ether	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	6050 mg/kg	-
	LD50 Oral	Rat	5660 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
	LD50 Oral	Mouse	2400 mg/kg	-
	LD50 Unreported	Rat	4500 mg/kg	-
Ethoxylated Alcohols	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1400 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Sodium Hydroxide	-	Acute LC50 25 ppm	Fish - Trout	24 hours
Ethylene Glycol Monobutyl Ether	-	Acute EC50 >1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute LC50 >1000 mg/L Marine water	Crustaceans - Amphipod - Chaetogammarus marinus - Young - 5 mm	48 hours
	-	Acute LC50 1490000 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 33 to 75 mm	96 hours
	-	Acute LC50 1250000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours
	-	Acute LC50 800000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Chronic NOEC 1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
Diethylene Glycol Monobutyl Ether	-	Acute LC50 2000000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours
	-	Acute LC50 1300000	Fish - Bluegill - Lepomis	96 hours

	ug/L Fresh water	macrochirus - 33 to 75 mm

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D002
Classification: - [Hazardous waste]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	3266	Corrosive liquid, Basic, Inorganic, NOS (Sodium Hydroxide)	8	II	
TDG Classification	Not determined.				
IMDG Class	Not determined.				

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

Product name

Ethylene Glycol Monobutyl Ether
Diethylene Glycol Monobutyl Ether

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Sodium Hydroxide; Sodium Dodecylbenzene Sulfonate

Clean Air Act (CAA) 112 regulated toxic substances: Diethylene Glycol Monobutyl Ether

All Components of this product are listed or exempt from listing on TSCA Inventory.

United States inventory (TSCA 8b): Not determined.

State Regulations

California Prop 65 No products were found.

Canada

WHMIS (Canada) Class D-2B: Material causing other toxic effects (Toxic).

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.*

Material Safety Data Sheet
OECD Format

Product:

SAFE CARE® SC-1000™ Aqueous Cleaner Concentrate

Revision Date: 06/01/04

Product Rating
Fire – 0
Toxicity - 0
Reactivity - 0
Special - 0
Health - 0
Safety - 0

HAZARD SCALE
4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name: ***SAFE CARE® SC-1000™ Aqueous Cleaner Concentrate***

Supplier: ***GEMTEK®*** Products
3808 North 28th Avenue
Phoenix, Arizona 85017 USA
www.gemtek.com - info@gemtek.com

Emergency Telephone Number: (602) 265-8586 or 800-331-7022 (in the U.S.)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name of the Substance: Proprietary Ternary Non-Ionic Surfactant Compound, which complies with OSHA 29 CFR XVII-1910.1200 Section (i) "Trade Secrets". Contains no hazardous components under current OSHA definitions. Contents include non-ionic surfactant, Tall-oil fatty acid, organic buffer, deionized water.

European Union: None of the components of this product are listed in Annex I to Directive 67/548/EEC or in Annexes II, III or V to Directive 1999/45/EC.

3. HAZARDS IDENTIFICATION

Most Important Hazards: None

Specific Hazards: May be an eye irritant. Do not spray into eyes. If irritation does occur, rinse with clean water.

4. FIRST AID MEASURES

General Advice: Product exhibits no adverse effects.

Inhalation: Non-reactive - No First Aid needed.
Skin Contact: Non-irritating - No First Aid needed.
Eye Contact: Rinse thoroughly with plenty of water.
Ingestion: Non-toxic - No First Aid needed.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: The product itself does not burn.

Specific Hazards: None

Specific Methods: Product itself can be used to put out fires.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: None needed. Caution floor may be slippery.

Environmental Precautions: None needed; non-toxic, non-hazardous in neat form.

Methods for Cleaning Up: Filter and reuse or dispose directly by flushing area with water into sewer.

7. HANDLING AND STORAGE

Technical Measures/Precautions: Normal ventilation is adequate.

Safe Handling Advice: No special handling advice necessary.

Technical Measures/Storage Conditions: Low temperature can cause handling problems. Viscosity of material will increase.

Incompatible Products: No special restrictions on storage with other products.

Packaging Material: No restrictions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: General room ventilation is satisfactory.

Control Parameters: None needed.

Personal Protection Equipment

Respiratory: None needed.
Eye: Safety glasses may be used.
Hand: None needed.
Hygiene Measures: Avoid contact with eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

% Volatile by Volume: Nil
Boiling Point/Range: 100°C (212°F)
Color: Very light amber
Decomposition Temperature: > 348°C (658°F)
Dielectric Strength: 1500 volts @ 500 vps
Electric Conductivity: 7,500 µmhos
Evaporation Rate: 0.7 (slower than water)
Explosive Properties: None
Flash Point: None (Penske Martin Closed Cup)
Form: Slightly viscous liquid
Freezing Point: 0°C (32.0°F)
Melting Point/Range: Not Applicable
Odor: Mild surfactant odor
pH: 10.2 – 10.5 range
Relative Density: Greater than 1 (water = 1)
Specific Gravity: 1.009
Surface Tension: 29.4 dynes / cm
Vapor Density: 0.623
Vapor Pressure: 0.2 psi @ 20°C (68ºF)
Viscosity: < 100 cps @ 25°C (77°F)
Water Solubility: 99.935% (completely water soluble)

Volatile Organic Compounds: Considered none measurable by U.S. EPA Methods 601, 602 and 608

10. STABILITY AND REACTIVITY

Conditions to Avoid: No decomposition occurs.

Materials to Avoid: None. Does not react with other compounds.

Hazardous Decomposition Products: None.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Non-toxic.

Local Effects: None.

Specific Effects: None.

12. ECOLOGICAL INFORMATION

Non-toxic; non-hazardous; safe for the environment. This product is readily biodegradable according to OECD Method 301B, Modified Sturm Test and OECD Method 301C, MITI Test.

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products: Can be used after filtering. Product is recyclable.

Contaminated Packaging: If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991 if contaminated with hazardous materials. May be disposed of in neat form.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations. US DOT Classification: 55

15. REGULATORY INFORMATION

Product complies with all known regulatory considerations and is unregulated and not listed as a Hazmat by any agency.

16. OTHER INFORMATION

For further information, contact the Headquarters of *GEMTEK*® Products

Recommended Uses: Cleaner/Degreaser/Solvent

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for such material used in combination with any other materials or in any process, unless specified in the text.

Attachment D

Laboratory Sample Results

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 8, 2013

Mr. Akio Usuda
NRC Environmental Services
Pier D, Berth D47
Long Beach, CA 90802
Tel(562)432-1304 Fax(562)590-6701
E-Mail: ausuda@nrcc.com

Project: **78243 AA**
Lab I.D.: **131008-1**

Dear Mr. Usuda:

The **analytical results** for the liquid sample, received by our laboratory on October 8, 2013, are attached. The sample was received intact, accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manger

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **NRC Environmental Services**
Pier D, Berth D47
Long Beach, CA 90802
Tel(562)432-1304 Fax(562)590-6701

PROJECT: **78243 AA**
MATRIX: LIQUID
DATE SAMPLED: 10/07/13
REPORT TO: MR. AKIO USUDA

DATE RECEIVED: 10/08/13
DATE EXTRACTED: 10/08/13
DATE ANALYZED: 10/08/13
DATE REPORTED: 10/08/13

SAMPLE I.D.: **78243-1**
LAB I.D.: 131008-1

PCBs ANALYSIS, EPA 8082
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL	DF
PCB-1016	ND	2.00	25000
PCB-1221	ND	2.00	25000
PCB-1232	ND	2.00	25000
PCB-1242	ND	2.00	25000
PCB-1248	ND	2.00	25000
PCB-1254	ND	2.00	25000
PCB-1260	460000 ***	2.00	25000
TOTAL PCBs IN THE SAMPLE*	460000 ***	2.00	25000

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Non-Detected or Below the Actual Detection Limit
* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

QA/QC Report

Analysis: EPA 8082 (PCB)

Matrix: **Liquid (Oil)/Sludge/Solid** Date Analyzed: 10/8/2013
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 131007-50 MS/MSD

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP % RPD	ACP %REC
PCB (1016+1260)	0.00	20.0	21.6	**108%**	23.8	**119%**	**10%**	**0-20%**	**70-130**

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	20.0	24.8	**124%**	**75-125**

S.R. = Sample Result
spk conc = Spike Concentration
%REC = Percent Recovery
ACP %RPD = Acceptable Percent RPD Range
ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: B

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
1214 E. Lexington Avenue,
Pomona, CA 91766
Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
0 Same Day (circled)
0 24 Hours
0 48 Hours
0 72 Hours
0 1 Week (Standard)
Other:

RUSH

Misc.
~~POA 78243~~
9422

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required: PCB									COMMENTS
78243-1	13/008-1	10/7/13	1500	liquid	1 / 1 LA	5°C	ice	X									

Company Name: NRC Environmental Services
Address: 3777 Long Beach Blvd Suite 100
City/State/Zip: Long Beach CA 90807

Project Contact: Atrio Usurpo
Tel: 562 432 130X
Fax: ausude@NRCC.com

Sampler's Signature: [signature]
Project Name/ID: 78243 AA

Relinquished by: [signature]	Received by: [signature]	Date & Time: 10/8/13 0915	Instructions for Sample Storage After Analysis:
Relinquished by:	Received by:	Date & Time:	O Dispose of O Return to Client O Store (30 Days)
Relinquished by:	Received by:	Date & Time:	O Other:

CHAIN OF CUSTODY RECORD

Date: ______ WHITE WITH SAMPLE • YELLOW TO CLIENT Page ____ of ____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 16, 2013

Mr. Akio Usuda
NRC Environmental Services
3777 Long Beach Blvd., Suite 100
Long Beach, CA 90807
Tel(562)432-1304 Email:ausuda@nrces.com

Project: **Job #78243 American Airlines**
Lab I.D.: **131014-25**

Dear Mr. Usuda:

The **analytical results** for the wipe samples, received by our laboratory on October 14, 2013, are attached. The samples were received intact, accompanying chain of custody and also stored per the EPA protocols.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **NRC Environmental Services**
3777 Long Beach Blvd., Suite 100
Long Beach, CA 90802
Tel(562)432-1304 Email:ausuda@nrces.com

PROJECT: **Job #78243 American Airlines**
MATRIX:WIPE
DATE SAMPLED:10/14/13
REPORT TO:MR. AKIO USUDA

DATE RECEIVED:10/14/13
DATE EXTRACTED:10/15/13
DATE ANALYZED:10/16/13
DATE REPORTED:10/16/13

EPA 8082 FOR PCBs
UNITS: ug/100cm^2 = MICROGRAM PER 100 SQUARE CENTIMETERS

SAMPLE I.D.	LABORATORY I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
Floor Sample	131014-25	ND	ND	ND	ND	ND	ND	212	212	20
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1
	PQL	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

COMMENTS:
PQL = Practical Quantitation Limit
DF = Dilution Factor
Actual Detection Limit = PQL X DF
ND = Non-Detected or Below the Actual Detection Limit
* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

QA/QC Report

Analysis: EPA 8082 (PCB)

Matrix: **Wipe** Date Analyzed: **10/15/2013**

Unit: ug / 100 cm^2

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 131014-26 MS/MSD

Analyte	spk conc	MS	%REC	MSD	%REC	%RPD	ACP % RPD	ACP %REC
PCB (1016+1260)	20.0	19.1	**95%**	20.2	**101%**	**6%**	**0-20%**	**70-130**

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	20.0	17.2	**86%**	**75-125**

spk conc = Spike Concentration
%REC = Percent Recovery
ACP %RPD = Acceptable Percent RPD Range
ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: B

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
1214 E. Lexington Avenue,
Pomona, CA 91766
Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
O Same Day
~~O~~ 24 Hours
O 48 Hours
O 72 Hours
~~O~~ 1 Week (Standard)
O Other:
RUSH!

Misc.
PO#9933

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required: PCBs	COMMENTS
Floor Sample	131014-25	10/14/13	1320	Wipe	2 xVOCs		Hexane	X	

Company Name: NRC	**Project Contact:** Akio	**Sampler's Signature:**
Address: 1281 Broadway	**Tel:**	**Project Name/ID:** JOB#78243 American Airlines
City/State/Zip: Long Beach CA	**Fax:**	

Relinquished by:	Received by:	Date & Time: 10/14/13 1025	Instructions for Sample Storage After Analysis:
Relinquished by:	Received by:	Date & Time:	O Dispose of O Return to Client O Store (30 Days)
Relinquished by:	Received by:	Date & Time:	O Other:

CHAIN OF CUSTODY RECORD

Date: _____

WHITE WITH SAMPLE • YELLOW TO CLIENT

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 22, 2013

Mr. Akio Usuda
NRC Environmental Services
3777 Long Beach Blvd., Suite 100
Long Beach, CA 90807
Tel(562)432-1304 Email:ausuda@nrces.com

Project: **SWS Environmental**
Lab I.D.: **131021-87 through -91**

Dear Mr. Usuda:

The **analytical results** for the wipe samples, received by our laboratory on October 21, 2013, are attached. The samples were received intact, accompanying chain of custody and also stored per the EPA protocols.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **NRC Environmental Services**
3777 Long Beach Blvd., Suite 100
Long Beach, CA 90802
Tel(562)432-1304 Email:ausuda@nrces.com

PROJECT: **SWS Environmental**
MATRIX:WIPE
DATE SAMPLED:10/21/13
REPORT TO:MR. AKIO USUDA

DATE RECEIVED:10/21/13
DATE EXTRACTED:10/21/13
DATE ANALYZED:10/21-22/13
DATE REPORTED:10/22/13

EPA 8082 FOR PCBs
UNITS: ug/100cm^2 = MICROGRAM PER 100 SQUARE CENTIMETERS

SAMPLE I.D.	LABORATORY I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
#1	131021-87	ND	ND	ND	ND	ND	ND	11.9	11.9	1
#2	131021-88	ND	ND	ND	ND	ND	ND	13.1	13.1	1
#3	131021-89	ND	ND	ND	ND	ND	ND	11.5	11.5	1
#4	131021-90	ND	ND	ND	ND	ND	ND	147	147	25
#5	131021-91	ND	ND	ND	ND	ND	ND	47.5	47.5	25
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1
PQL		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

COMMENTS:
PQL = Practical Quantitation Limit
DF = Dilution Factor
Actual Detection Limit = PQL X DF
ND = Non-Detected or Below the Actual Detection Limit
* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

QA/QC Report

Analysis: EPA 8082 (PCB)

Matrix: **Wipe** Date Analyzed: **10/21-22/2013**

Unit: ug / 100 cm^2

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 131021-LCS1/2

Analyte	spk conc	MS	%REC	MSD	%REC	%RPD	ACP % RPD	ACP %REC
PCB (1016+1260)	20.0	19.9	**100%**	22.9	**115%**	**14%**	**0-20%**	**70-130**

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	20.0	23.4	**117%**	**75-125**

spk conc = Spike Concentration
%REC = Percent Recovery
ACP %RPD = Acceptable Percent RPD Range
ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: B

Final Reviewer: C

Enviro-Chem, Inc. Laboratories
1214 E. Lexington Avenue,
Pomona, CA 91766
Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
0 Same Day
0 24 Hours
0 48 Hours
0 72 Hours
0 1 Week (Standard)
Other:

RUSH

Misc. Job # 78243

PCBs

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
#1	131021-87	10/21/13		Wipe	1		Hexane	X	
#2	-88	10/21/13		Wipe	1			X	
#3	-89	10/21/13		Wipe	1			X	
#4	-90	10/21/13		Wipe	1			X	
#5	-91	10/21/13		Wipe	1			X	
					xVOC				

Company Name: NRC Environmental · Ste 100
Address: 3777 Long Beach Bl
City/State/Zip: Long Beach, CA
Project Contact: Akio
Tel: 310-629-7959
Fax:
Sampler's Signature:
Project Name/ID: SWS Environmental

Relinquished by:	Received by: Jessica R	Date & Time: 10/21/13 1425
Relinquished by:	Received by:	Date & Time:
Relinquished by:	Received by:	Date & Time:

Instructions for Sample Storage After Analysis:
O Dispose of O Return to Client O Store (30 Days)
O Other:

CHAIN OF CUSTODY RECORD

Date: _____

WHITE WITH SAMPLE • YELLOW TO CLIENT

Page _____ of _____

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1721

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ARCADIS U.S., Inc.

Client Project Name: American Airline

Attention: Mike Asakawa
320 Commerce, Suite 200
Irvine, CA 92602-1363

Approved for release on 11/25/2013 by:
Virendra Patel
Project Manager

ResultLink

Email your PM

ACCREDITED IN ACCORDANCE WITH nelac

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: American Airline
Work Order Number: 13-11-1721

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-11-1721 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/21/13. They were assigned to Work Order 13-11-1721.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Return to Contents

Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ARCADIS U.S., Inc. 320 Commerce, Suite 200 Irvine, CA 92602-1363	Work Order:	13-11-1721
		Project Name:	American Airline
		PO Number:	
		Date/Time Received:	11/21/13 13:51
		Number of Containers:	3
Attn:	Mike Asakawa		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
WS-1	13-11-1721-1	11/21/13 12:35	1	Wipe
WS-2	13-11-1721-2	11/21/13 12:38	1	Wipe
WS-3	13-11-1721-3	11/21/13 12:41	1	Wipe

Return to Contents

Calscience Environmental Laboratories, Inc.

Detections Summary

Client: ARCADIS U.S., Inc.
320 Commerce, Suite 200
Irvine, CA 92602-1363

Work Order: 13-11-1721
Project Name: American Airline
Received: 11/21/13

Attn: Mike Asakawa

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
WS-1 (13-11-1721-1)						
Aroclor-1260	130		50	ug/smpl	EPA 8082	EPA 3545
WS-2 (13-11-1721-2)						
Aroclor-1260	130		50	ug/smpl	EPA 8082	EPA 3545
WS-3 (13-11-1721-3)						
Aroclor-1260	37		10	ug/smpl	EPA 8082	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

ARCADIS U.S., Inc.
320 Commerce, Suite 200
Irvine, CA 92602-1363

Date Received: 11/21/13
Work Order: 13-11-1721
Preparation: EPA 3545
Method: EPA 8082
Units: ug/smpl

Project: American Airline

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
WS-1	**13-11-1721-1-A**	**11/21/13 12:35**	**Wipe**	**GC 58**	**11/21/13**	**11/22/13 21:46**	**131121L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	50	
Aroclor-1221	ND	50	50	
Aroclor-1232	ND	50	50	
Aroclor-1242	ND	50	50	
Aroclor-1248	ND	50	50	
Aroclor-1254	ND	50	50	
Aroclor-1260	130	50	50	
Aroclor-1262	ND	50	50	
Aroclor-1268	ND	50	50	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	50-130	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
WS-2	**13-11-1721-2-A**	**11/21/13 12:38**	**Wipe**	**GC 58**	**11/21/13**	**11/22/13 22:04**	**131121L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	50	
Aroclor-1221	ND	50	50	
Aroclor-1232	ND	50	50	
Aroclor-1242	ND	50	50	
Aroclor-1248	ND	50	50	
Aroclor-1254	ND	50	50	
Aroclor-1260	130	50	50	
Aroclor-1262	ND	50	50	
Aroclor-1268	ND	50	50	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-130	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ARCADIS U.S., Inc.
320 Commerce, Suite 200
Irvine, CA 92602-1363

Date Received: 11/21/13
Work Order: 13-11-1721
Preparation: EPA 3545
Method: EPA 8082
Units: ug/smpl

Project: American Airline

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
WS-3	**13-11-1721-3-A**	**11/21/13 12:41**	**Wipe**	**GC 58**	**11/21/13**	**11/25/13 12:28**	**131121L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	10	10	
Aroclor-1221	ND	10	10	
Aroclor-1232	ND	10	10	
Aroclor-1242	ND	10	10	
Aroclor-1248	ND	10	10	
Aroclor-1254	ND	10	10	
Aroclor-1260	37	10	10	
Aroclor-1262	ND	10	10	
Aroclor-1268	ND	10	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	50-130	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

Method Blank	099-12-582-249	N/A	Solid	GC 58	11/21/13	11/22/13 16:40	131121L12

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1	
Aroclor-1221	ND	1.0	1	
Aroclor-1232	ND	1.0	1	
Aroclor-1242	ND	1.0	1	
Aroclor-1248	ND	1.0	1	
Aroclor-1254	ND	1.0	1	
Aroclor-1260	ND	1.0	1	
Aroclor-1262	ND	1.0	1	
Aroclor-1268	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	50-130	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ARCADIS U.S., Inc.
320 Commerce, Suite 200
Irvine, CA 92602-1363

Project: American Airline

Date Received: 11/21/13
Work Order: 13-11-1721
Preparation: EPA 3545
Method: EPA 8082

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-582-249	**Solid**	**GC 58**	**11/21/13**	**11/22/13 16:04**	**131121L12**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	1.750	87	1.805	90	50-135	3	0-25	
Aroclor-1260	2.000	1.793	90	1.827	91	50-135	2	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-11-1721

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3545	669	GC 58	1

Return to Contents

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1721 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Return to Contents

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY: **13-11-1721**

Date: 11/21/13

Page: 1 of 1

LABORATORY CLIENT: Arcadis

ADDRESS: 8001 Irvine Center Dr Suite 1100

CITY: Irvine STATE: CA ZIP: 92618

TEL: 949 450-7903 E-MAIL: Mike.asakawa@arcadis-us.com

CLIENT PROJECT NAME / NUMBER: American Airlines

P.O. NO.: 03961129.000.00300

PROJECT CONTACT: Mike asakawa

SAMPLER(S): (PRINT) Matt Worthington

TURNAROUND TIME: ☐ SAME DAY ☒ 24 HR ☒ 48 HR ☐ 72 HR ☐ STANDARD

☐ COELT EDF | GLOBAL ID | LOG CODE

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010B/747X)	Cr(VI) [7196 or 7199 or 218.6]
1	WS-1	11/21/13	12:35	wipe	1		✓											X			
2	WS-2	"	12:38	"	1		✓											X			
3	WS-3	"	12:41	"	1		✓											X			

Relinquished by: (Signature) Matt Worthington	Received by: (Signature/Affiliation) CEL	Date: 11/21/13	Time: 13:51
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

09/01/13 Revision

Return to Contents

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1721

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Arcadis

DATE: 11/21/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 4.2 °C - 0.2 °C (CF) = 4.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 739

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 739

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☑ 4oz (GJ) wipe **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

Return to Contents

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-74412-1
Client Project/Site: AA LAX Project

For:
ARCADIS U.S., Inc
Attn: Tania M. Alarcon
9620 Chesapeake Drive, Suite 106
San Diego, California 92123

Attn: George Cebula

Authorized for release by:
4/4/2014 12:39:58 PM

Lena Davidkova, Project Manager II
(949)261-1022
lena.davidkova@testamericainc.com

Table of Contents

Sample Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-74412-1	CS 01	Solid	03/27/14 09:45	03/28/14 13:35
440-74412-2	CS 02	Solid	03/27/14 09:55	03/28/14 13:35
440-74412-3	CS 03	Solid	03/27/14 10:10	03/28/14 13:35
440-74412-4	CS 04	Solid	03/27/14 10:25	03/28/14 13:35
440-74412-5	CS 05	Solid	03/27/14 10:35	03/28/14 13:35
440-74412-6	CS 06	Solid	03/27/14 10:50	03/28/14 13:35
440-74412-7	CS 07	Solid	03/27/14 11:10	03/28/14 13:35
440-74412-8	CS 08	Solid	03/27/14 11:18	03/28/14 13:35
440-74412-9	CS 09	Solid	03/27/14 11:30	03/28/14 13:35
440-74412-10	CS 10	Solid	03/27/14 11:45	03/28/14 13:35
440-74412-11	CS 11	Solid	03/27/14 12:30	03/28/14 13:35
440-74412-12	CS 12	Solid	03/27/14 12:50	03/28/14 13:35
440-74412-13	CS 13	Solid	03/27/14 13:05	03/28/14 13:35
440-74412-14	CS 14	Solid	03/27/14 13:15	03/28/14 13:35
440-74412-15	CS 15	Solid	03/27/14 13:25	03/28/14 13:35
440-74412-16	CS 16	Solid	03/27/14 13:45	03/28/14 13:35
440-74412-17	CS 17	Solid	03/27/14 13:55	03/28/14 13:35
440-74412-18	CS 18	Solid	03/27/14 14:05	03/28/14 13:35
440-74412-19	CS 19	Solid	03/27/14 14:13	03/28/14 13:35
440-74412-20	CS 20	Solid	03/27/14 14:24	03/28/14 13:35
440-74412-21	CS 21	Solid	03/28/14 09:03	03/28/14 13:35
440-74412-22	CS 22	Solid	03/28/14 09:20	03/28/14 13:35
440-74412-23	CS 23	Solid	03/28/14 09:32	03/28/14 13:35
440-74412-24	CS 24	Solid	03/28/14 09:45	03/28/14 13:35
440-74412-25	CS 25	Solid	03/28/14 09:55	03/28/14 13:35
440-74412-26	CS 26	Solid	03/28/14 10:00	03/28/14 13:35
440-74412-27	CS 27	Solid	03/28/14 10:15	03/28/14 13:35
440-74412-28	CS 28	Solid	03/28/14 10:20	03/28/14 13:35
440-74412-29	CS 29	Solid	03/28/14 10:30	03/28/14 13:35
440-74412-30	CS 30	Solid	03/28/14 10:40	03/28/14 13:35
440-74412-31	Equipment Blank	Water	03/28/14 10:50	03/28/14 13:35

Job ID: 440-74412-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-74412-1

Comments
No additional comments.

Receipt
The samples were received on 3/28/2014 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.7º C.

GC Semi VOA
Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 172881 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (440-74412-20 MS), (440-74412-20 MSD)

Method(s) 8082: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for batch 172881 was outside control limits due to sample matrix interference. (440-74412-20 MSD)

Method(s) 8082: The following sample(s) required a dilution due to the nature of the sample matrix: CS 25 (440-74412-25). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 173034. (LCS 440-173034/4-A)

Method(s) 8082: The following sample(s) contained more than one Aroclor with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor: CS 20 (440-74412-20), CS 28 (440-74412-28).

Method(s) 8082: The following sample(s) required a dilution due to the nature of the sample matrix: CS 04 (440-74412-4), CS 09 (440-74412-9), CS 17 (440-74412-17), CS 19 (440-74412-19). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: The following sample(s) contained more than one Aroclor with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor: CS 04 (440-74412-4), CS 05 (440-74412-5), CS 09 (440-74412-9), CS 11 (440-74412-11), CS 17 (440-74412-17), CS 19 (440-74412-19).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: CS 01

Lab Sample ID: 440-74412-1

Date Collected: 03/27/14 09:45

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*45 - 120*	*04/02/14 07:00*	*04/02/14 23:17*	*1*

Client Sample ID: CS 02

Lab Sample ID: 440-74412-2

Date Collected: 03/27/14 09:55

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1
Aroclor 1260	**22**	**J**	50	17	ug/Kg		04/02/14 07:00	04/02/14 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*45 - 120*	*04/02/14 07:00*	*04/02/14 23:32*	*1*

Client Sample ID: CS 03

Lab Sample ID: 440-74412-3

Date Collected: 03/27/14 10:10

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1
Aroclor 1260	**46**	**J**	50	17	ug/Kg		04/02/14 07:00	04/02/14 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*45 - 120*	*04/02/14 07:00*	*04/02/14 23:48*	*1*

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: CS 04

Lab Sample ID: 440-74412-4

Date Collected: 03/27/14 10:25

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1221	ND		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1232	ND		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1242	ND		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1248	ND		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1254	**22000**	**J p**	25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500
Aroclor 1260	**91000**		25000	8500	ug/Kg		04/02/14 07:00	04/03/14 17:01	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*0*	*X*	*45 - 120*	*04/02/14 07:00*	*04/03/14 17:01*	*500*

Client Sample ID: CS 05

Lab Sample ID: 440-74412-5

Date Collected: 03/27/14 10:35

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1254	**88**	**p**	50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1
Aroclor 1260	**290**		50	17	ug/Kg		04/02/14 07:00	04/03/14 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*45 - 120*	*04/02/14 07:00*	*04/03/14 15:28*	*1*

Client Sample ID: CS 06

Lab Sample ID: 440-74412-6

Date Collected: 03/27/14 10:50

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1
Aroclor 1260	**31**	**J**	50	17	ug/Kg		04/02/14 07:00	04/03/14 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*45 - 120*	*04/02/14 07:00*	*04/03/14 16:14*	*1*

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: CS 07

Lab Sample ID: 440-74412-7

Date Collected: 03/27/14 11:10

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1
Aroclor 1260	**37**	**J**	50	17	ug/Kg		04/02/14 07:00	04/03/14 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*45 - 120*	*04/02/14 07:00*	*04/03/14 16:30*	*1*

Client Sample ID: CS 08

Lab Sample ID: 440-74412-8

Date Collected: 03/27/14 11:18

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*45 - 120*	*04/02/14 07:00*	*04/03/14 01:04*	*1*

Client Sample ID: CS 09

Lab Sample ID: 440-74412-9

Date Collected: 03/27/14 11:30

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1221	ND		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1232	ND		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1242	ND		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1248	ND		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1254	**2900**	**p**	2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50
Aroclor 1260	**11000**		2500	850	ug/Kg		04/02/14 07:00	04/03/14 15:59	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*517*	*X*	*45 - 120*	*04/02/14 07:00*	*04/03/14 15:59*	*50*

Client Sample ID: CS 10

Lab Sample ID: 440-74412-10

Date Collected: 03/27/14 11:45

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*04/02/14 07:00*	*04/03/14 01:34*	*1*

Client Sample ID: CS 11

Lab Sample ID: 440-74412-11

Date Collected: 03/27/14 12:30

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1254	**21**	**J p**	50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1
Aroclor 1260	**110**		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*04/02/14 07:00*	*04/03/14 16:45*	*1*

Client Sample ID: CS 12

Lab Sample ID: 440-74412-12

Date Collected: 03/27/14 12:50

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*67*		*45 - 120*	*04/02/14 07:00*	*04/03/14 16:20*	*1*

Client Sample ID: CS 13

Lab Sample ID: 440-74412-13

Date Collected: 03/27/14 13:05

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1
Aroclor 1260	**22**	**J**	50	17	ug/Kg		04/02/14 07:00	04/03/14 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*67*		*45 - 120*	*04/02/14 07:00*	*04/03/14 16:43*	*1*

Client Sample ID: CS 14

Lab Sample ID: 440-74412-14

Date Collected: 03/27/14 13:15

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1254	**24**	**J**	50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1
Aroclor 1260	**38**	**J**	50	17	ug/Kg		04/02/14 07:00	04/03/14 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*04/02/14 07:00*	*04/03/14 17:05*	*1*

Client Sample ID: CS 15

Lab Sample ID: 440-74412-15

Date Collected: 03/27/14 13:25

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*70*		*45 - 120*	*04/02/14 07:00*	*04/03/14 17:28*	*1*

Client Sample ID: CS 16

Lab Sample ID: 440-74412-16

Date Collected: 03/27/14 13:45

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*45 - 120*	*04/02/14 07:00*	*04/03/14 17:51*	*1*

Client Sample ID: CS 17

Lab Sample ID: 440-74412-17

Date Collected: 03/27/14 13:55

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1221	ND		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1232	ND		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1242	ND		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1248	ND		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1254	**510000**		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000
Aroclor 1260	**1300000**		250000	85000	ug/Kg		04/02/14 07:00	04/03/14 20:01	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*0*	*X*	*45 - 120*	*04/02/14 07:00*	*04/03/14 20:01*	*5000*

Client Sample ID: CS 18

Lab Sample ID: 440-74412-18

Date Collected: 03/27/14 14:05

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1254	**97**		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1
Aroclor 1260	**240**		50	17	ug/Kg		04/02/14 07:00	04/03/14 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*45 - 120*	*04/02/14 07:00*	*04/03/14 17:16*	*1*

Client Sample ID: CS 19

Lab Sample ID: 440-74412-19

Date Collected: 03/27/14 14:13

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1221	ND		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1232	ND		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1242	ND		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1248	ND		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1254	**110000**	**J p**	120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500
Aroclor 1260	**490000**		120000	42000	ug/Kg		04/02/14 07:00	04/03/14 20:32	2500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*0*	*X*	*45 - 120*	*04/02/14 07:00*	*04/03/14 20:32*	*2500*

Client Sample ID: CS 20

Lab Sample ID: 440-74412-20

Date Collected: 03/27/14 14:24

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1254	**95**		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1
Aroclor 1260	**160**		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*45 - 120*	*03/31/14 15:37*	*04/01/14 17:28*	*1*

Client Sample ID: CS 21

Lab Sample ID: 440-74412-21

Date Collected: 03/28/14 09:03

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1221	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1232	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1242	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1248	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1254	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1
Aroclor 1260	ND		49	17	ug/Kg		03/31/14 15:37	03/31/14 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*66*		*45 - 120*	*03/31/14 15:37*	*03/31/14 22:15*	*1*

Client Sample ID: CS 22

Lab Sample ID: 440-74412-22

Date Collected: 03/28/14 09:20

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*45 - 120*	*03/31/14 15:37*	*03/31/14 22:31*	*1*

Client Sample ID: CS 23

Lab Sample ID: 440-74412-23

Date Collected: 03/28/14 09:32

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*45 - 120*	*03/31/14 15:37*	*03/31/14 22:47*	*1*

Client Sample ID: CS 24

Lab Sample ID: 440-74412-24

Date Collected: 03/28/14 09:45

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*	*03/31/14 15:37*	*03/31/14 23:02*	*1*

Client Sample ID: CS 25

Lab Sample ID: 440-74412-25

Date Collected: 03/28/14 09:55

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1221	ND		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1232	ND		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1242	ND		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1248	ND		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1254	**4100**		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20
Aroclor 1260	**10000**		990	340	ug/Kg		03/31/14 15:37	04/01/14 15:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*256*	*X*	*45 - 120*	*03/31/14 15:37*	*04/01/14 15:52*	*20*

Client Sample ID: CS 26

Lab Sample ID: 440-74412-26

Date Collected: 03/28/14 10:00

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*73*		*45 - 120*	*03/31/14 15:37*	*03/31/14 23:33*	*1*

Client Sample ID: CS 27

Lab Sample ID: 440-74412-27

Date Collected: 03/28/14 10:15

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*03/31/14 15:37*	*03/31/14 23:49*	*1*

Client Sample ID: CS 28

Lab Sample ID: 440-74412-28

Date Collected: 03/28/14 10:20

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1254	**130**		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1
Aroclor 1260	**330**		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*45 - 120*	*03/31/14 15:37*	*04/01/14 17:44*	*1*

Client Sample ID: CS 29

Lab Sample ID: 440-74412-29

Date Collected: 03/28/14 10:30

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1221	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1232	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1242	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1248	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1254	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1
Aroclor 1260	ND		49	17	ug/Kg		03/31/14 15:37	04/01/14 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*45 - 120*	*03/31/14 15:37*	*04/01/14 00:20*	*1*

Client Sample ID: CS 30

Lab Sample ID: 440-74412-30

Date Collected: 03/28/14 10:40

Matrix: Solid

Date Received: 03/28/14 13:35

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1
Aroclor 1260	**27**	**J**	50	17	ug/Kg		03/31/14 15:37	04/01/14 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*	*03/31/14 15:37*	*04/01/14 17:13*	*1*

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: Equipment Blank
Date Collected: 03/28/14 10:50
Date Received: 03/28/14 13:35

Lab Sample ID: 440-74412-31
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1221	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1232	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1242	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1248	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1254	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1
Aroclor 1260	ND		0.94	0.24	ug/L		04/01/14 08:47	04/01/14 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*45 - 120*	*04/01/14 08:47*	*04/01/14 18:57*	*1*

Method Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Client Sample ID: CS 01

Lab Sample ID: 440-74412-1

Date Collected: 03/27/14 09:45

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.04 g	2 mL	173538	04/02/14 23:17	CN	TAL IRV

Client Sample ID: CS 02

Lab Sample ID: 440-74412-2

Date Collected: 03/27/14 09:55

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	173538	04/02/14 23:32	CN	TAL IRV

Client Sample ID: CS 03

Lab Sample ID: 440-74412-3

Date Collected: 03/27/14 10:10

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	173538	04/02/14 23:48	CN	TAL IRV

Client Sample ID: CS 04

Lab Sample ID: 440-74412-4

Date Collected: 03/27/14 10:25

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		500	15.02 g	2 mL	173538	04/03/14 17:01	CN	TAL IRV

Client Sample ID: CS 05

Lab Sample ID: 440-74412-5

Date Collected: 03/27/14 10:35

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.03 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.03 g	2 mL	173538	04/03/14 15:28	CN	TAL IRV

Client Sample ID: CS 06

Lab Sample ID: 440-74412-6

Date Collected: 03/27/14 10:50

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.02 g	2 mL	173538	04/03/14 16:14	CN	TAL IRV

Client Sample ID: CS 07

Lab Sample ID: 440-74412-7

Date Collected: 03/27/14 11:10

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.02 g	2 mL	173538	04/03/14 16:30	CN	TAL IRV

Client Sample ID: CS 08

Lab Sample ID: 440-74412-8

Date Collected: 03/27/14 11:18

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.00 g	2 mL	173538	04/03/14 01:04	CN	TAL IRV

Client Sample ID: CS 09

Lab Sample ID: 440-74412-9

Date Collected: 03/27/14 11:30

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		50	15.02 g	2 mL	173538	04/03/14 15:59	CN	TAL IRV

Client Sample ID: CS 10

Lab Sample ID: 440-74412-10

Date Collected: 03/27/14 11:45

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.04 g	2 mL	173538	04/03/14 01:34	CN	TAL IRV

Client Sample ID: CS 11

Lab Sample ID: 440-74412-11

Date Collected: 03/27/14 12:30

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	173538	04/03/14 16:45	CN	TAL IRV

Client Sample ID: CS 12

Lab Sample ID: 440-74412-12

Date Collected: 03/27/14 12:50

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.01 g	2 mL	173739	04/03/14 16:20	CN	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: CS 13

Lab Sample ID: 440-74412-13

Date Collected: 03/27/14 13:05

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.01 g	2 mL	173739	04/03/14 16:43	CN	TAL IRV

Client Sample ID: CS 14

Lab Sample ID: 440-74412-14

Date Collected: 03/27/14 13:15

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.04 g	2 mL	173739	04/03/14 17:05	CN	TAL IRV

Client Sample ID: CS 15

Lab Sample ID: 440-74412-15

Date Collected: 03/27/14 13:25

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	173739	04/03/14 17:28	CN	TAL IRV

Client Sample ID: CS 16

Lab Sample ID: 440-74412-16

Date Collected: 03/27/14 13:45

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.02 g	2 mL	173739	04/03/14 17:51	CN	TAL IRV

Client Sample ID: CS 17

Lab Sample ID: 440-74412-17

Date Collected: 03/27/14 13:55

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		5000	15.05 g	2 mL	173538	04/03/14 20:01	CN	TAL IRV

Client Sample ID: CS 18

Lab Sample ID: 440-74412-18

Date Collected: 03/27/14 14:05

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		1	15.04 g	2 mL	173538	04/03/14 17:16	CN	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: CS 19

Lab Sample ID: 440-74412-19

Date Collected: 03/27/14 14:13

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	2 mL	173295	04/02/14 07:00	AC	TAL IRV
Total/NA	Analysis	8082		2500	15.01 g	2 mL	173538	04/03/14 20:32	CN	TAL IRV

Client Sample ID: CS 20

Lab Sample ID: 440-74412-20

Date Collected: 03/27/14 14:24

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.12 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.12 g	2 mL	172958	04/01/14 17:28	CN	TAL IRV

Client Sample ID: CS 21

Lab Sample ID: 440-74412-21

Date Collected: 03/28/14 09:03

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.24 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.24 g	2 mL	172958	03/31/14 22:15	CN	TAL IRV

Client Sample ID: CS 22

Lab Sample ID: 440-74412-22

Date Collected: 03/28/14 09:20

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.01 g	2 mL	172958	03/31/14 22:31	CN	TAL IRV

Client Sample ID: CS 23

Lab Sample ID: 440-74412-23

Date Collected: 03/28/14 09:32

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.10 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.10 g	2 mL	172958	03/31/14 22:47	CN	TAL IRV

Client Sample ID: CS 24

Lab Sample ID: 440-74412-24

Date Collected: 03/28/14 09:45

Matrix: Solid

Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	172958	03/31/14 23:02	CN	TAL IRV

Client Sample ID: CS 25 — **Lab Sample ID: 440-74412-25**
Date Collected: 03/28/14 09:55 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.21 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		20	15.21 g	2 mL	172958	04/01/14 15:52	CN	TAL IRV

Client Sample ID: CS 26 — **Lab Sample ID: 440-74412-26**
Date Collected: 03/28/14 10:00 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.09 g	2 mL	172958	03/31/14 23:33	CN	TAL IRV

Client Sample ID: CS 27 — **Lab Sample ID: 440-74412-27**
Date Collected: 03/28/14 10:15 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.01 g	2 mL	172958	03/31/14 23:49	CN	TAL IRV

Client Sample ID: CS 28 — **Lab Sample ID: 440-74412-28**
Date Collected: 03/28/14 10:20 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.07 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.07 g	2 mL	172958	04/01/14 17:44	CN	TAL IRV

Client Sample ID: CS 29 — **Lab Sample ID: 440-74412-29**
Date Collected: 03/28/14 10:30 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.17 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.17 g	2 mL	172958	04/01/14 00:20	CN	TAL IRV

Client Sample ID: CS 30 — **Lab Sample ID: 440-74412-30**
Date Collected: 03/28/14 10:40 — **Matrix: Solid**
Date Received: 03/28/14 13:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	2 mL	172881	03/31/14 15:37	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.15 g	2 mL	172958	04/01/14 17:13	CN	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Client Sample ID: Equipment Blank
Date Collected: 03/28/14 10:50
Date Received: 03/28/14 13:35

Lab Sample ID: 440-74412-31
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1060 mL	2 mL	173034	04/01/14 08:47	AC	TAL IRV
Total/NA	Analysis	8082		1	1060 mL	2 mL	173188	04/01/14 18:57	CN	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-172881/1-A
Matrix: Solid
Analysis Batch: 172958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172881

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1221	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1232	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1242	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1248	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1254	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1
Aroclor 1260	ND		50	17	ug/Kg		03/31/14 15:37	03/31/14 20:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*45 - 120*	*03/31/14 15:37*	*03/31/14 20:11*	*1*

Lab Sample ID: LCS 440-172881/2-A
Matrix: Solid
Analysis Batch: 172958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172881

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			66.7	63.1		ug/Kg		95	65 - 115		
Aroclor 1260			66.7	56.2		ug/Kg		84	65 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*45 - 120*

Lab Sample ID: 440-74412-20 MS
Matrix: Solid
Analysis Batch: 172958

Client Sample ID: CS 20
Prep Type: Total/NA
Prep Batch: 172881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		66.3	50.5		ug/Kg		76	50 - 120		
Aroclor 1260	170		66.3	76.7	F1	ug/Kg		-140	50 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*77*		*45 - 120*

Lab Sample ID: 440-74412-20 MSD
Matrix: Solid
Analysis Batch: 172958

Client Sample ID: CS 20
Prep Type: Total/NA
Prep Batch: 172881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		66.6	55.6		ug/Kg		84	50 - 120	10	30
Aroclor 1260	170		66.6	107	F1 F2	ug/Kg		-93	50 - 125	33	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*83*		*45 - 120*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 440-173034/1-A
Matrix: Water
Analysis Batch: 173188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1221	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1232	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1242	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1248	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1254	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1
Aroclor 1260	ND		1.0	0.25	ug/L		04/01/14 08:47	04/01/14 17:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 120*	*04/01/14 08:47*	*04/01/14 17:39*	*1*

Lab Sample ID: LCS 440-173034/4-A
Matrix: Water
Analysis Batch: 173188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173034

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			1.00	0.897	J	ug/L		90	50 - 115		
Aroclor 1260			1.00	0.870	J	ug/L		87	60 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*94*		*45 - 120*

Lab Sample ID: LCSD 440-173034/5-A
Matrix: Water
Analysis Batch: 173188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173034

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016			1.00	0.858	J	ug/L		86	50 - 115	2	30
Aroclor 1260			1.00	0.852	J	ug/L		85	60 - 120	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 120*

Lab Sample ID: MB 440-173295/1-A
Matrix: Solid
Analysis Batch: 173538

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1221	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1232	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1242	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1248	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1254	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1
Aroclor 1260	ND		50	17	ug/Kg		04/02/14 07:00	04/02/14 22:16	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 440-173295/1-A
Matrix: Solid
Analysis Batch: 173538

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173295

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		45 - 120	04/02/14 07:00	04/02/14 22:16	1

Lab Sample ID: LCS 440-173295/2-A
Matrix: Solid
Analysis Batch: 173538

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173295

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			66.7	60.8		ug/Kg		91	65 - 115		
Aroclor 1260			66.7	59.2		ug/Kg		89	65 - 115		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	87		45 - 120

Lab Sample ID: 440-74412-1 MS
Matrix: Solid
Analysis Batch: 173538

Client Sample ID: CS 01
Prep Type: Total/NA
Prep Batch: 173295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		66.5	51.4		ug/Kg		77	50 - 120		
Aroclor 1260	ND		66.5	47.8	J	ug/Kg		72	50 - 125		

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	69		45 - 120

Lab Sample ID: 440-74412-1 MSD
Matrix: Solid
Analysis Batch: 173538

Client Sample ID: CS 01
Prep Type: Total/NA
Prep Batch: 173295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		66.6	60.5		ug/Kg		91	50 - 120	16	30
Aroclor 1260	ND		66.6	53.9		ug/Kg		81	50 - 125	12	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	75		45 - 120

GC Semi VOA

Prep Batch: 172881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-20	CS 20	Total/NA	Solid	3546	
440-74412-20 MS	CS 20	Total/NA	Solid	3546	
440-74412-20 MSD	CS 20	Total/NA	Solid	3546	
440-74412-21	CS 21	Total/NA	Solid	3546	
440-74412-22	CS 22	Total/NA	Solid	3546	
440-74412-23	CS 23	Total/NA	Solid	3546	
440-74412-24	CS 24	Total/NA	Solid	3546	
440-74412-25	CS 25	Total/NA	Solid	3546	
440-74412-26	CS 26	Total/NA	Solid	3546	
440-74412-27	CS 27	Total/NA	Solid	3546	
440-74412-28	CS 28	Total/NA	Solid	3546	
440-74412-29	CS 29	Total/NA	Solid	3546	
440-74412-30	CS 30	Total/NA	Solid	3546	
LCS 440-172881/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-172881/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 172958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-20	CS 20	Total/NA	Solid	8082	172881
440-74412-20 MS	CS 20	Total/NA	Solid	8082	172881
440-74412-20 MSD	CS 20	Total/NA	Solid	8082	172881
440-74412-21	CS 21	Total/NA	Solid	8082	172881
440-74412-22	CS 22	Total/NA	Solid	8082	172881
440-74412-23	CS 23	Total/NA	Solid	8082	172881
440-74412-24	CS 24	Total/NA	Solid	8082	172881
440-74412-25	CS 25	Total/NA	Solid	8082	172881
440-74412-26	CS 26	Total/NA	Solid	8082	172881
440-74412-27	CS 27	Total/NA	Solid	8082	172881
440-74412-28	CS 28	Total/NA	Solid	8082	172881
440-74412-29	CS 29	Total/NA	Solid	8082	172881
440-74412-30	CS 30	Total/NA	Solid	8082	172881
LCS 440-172881/2-A	Lab Control Sample	Total/NA	Solid	8082	172881
MB 440-172881/1-A	Method Blank	Total/NA	Solid	8082	172881

Prep Batch: 173034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-31	Equipment Blank	Total/NA	Water	3510C	
LCS 440-173034/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-173034/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-173034/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 173188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-31	Equipment Blank	Total/NA	Water	8082	173034
LCS 440-173034/4-A	Lab Control Sample	Total/NA	Water	8082	173034
LCSD 440-173034/5-A	Lab Control Sample Dup	Total/NA	Water	8082	173034
MB 440-173034/1-A	Method Blank	Total/NA	Water	8082	173034

Prep Batch: 173295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-1	CS 01	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 173295 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-1 MS	CS 01	Total/NA	Solid	3546	
440-74412-1 MSD	CS 01	Total/NA	Solid	3546	
440-74412-2	CS 02	Total/NA	Solid	3546	
440-74412-3	CS 03	Total/NA	Solid	3546	
440-74412-4	CS 04	Total/NA	Solid	3546	
440-74412-5	CS 05	Total/NA	Solid	3546	
440-74412-6	CS 06	Total/NA	Solid	3546	
440-74412-7	CS 07	Total/NA	Solid	3546	
440-74412-8	CS 08	Total/NA	Solid	3546	
440-74412-9	CS 09	Total/NA	Solid	3546	
440-74412-10	CS 10	Total/NA	Solid	3546	
440-74412-11	CS 11	Total/NA	Solid	3546	
440-74412-12	CS 12	Total/NA	Solid	3546	
440-74412-13	CS 13	Total/NA	Solid	3546	
440-74412-14	CS 14	Total/NA	Solid	3546	
440-74412-15	CS 15	Total/NA	Solid	3546	
440-74412-16	CS 16	Total/NA	Solid	3546	
440-74412-17	CS 17	Total/NA	Solid	3546	
440-74412-18	CS 18	Total/NA	Solid	3546	
440-74412-19	CS 19	Total/NA	Solid	3546	
LCS 440-173295/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-173295/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 173538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-1	CS 01	Total/NA	Solid	8082	173295
440-74412-1 MS	CS 01	Total/NA	Solid	8082	173295
440-74412-1 MSD	CS 01	Total/NA	Solid	8082	173295
440-74412-2	CS 02	Total/NA	Solid	8082	173295
440-74412-3	CS 03	Total/NA	Solid	8082	173295
440-74412-4	CS 04	Total/NA	Solid	8082	173295
440-74412-5	CS 05	Total/NA	Solid	8082	173295
440-74412-6	CS 06	Total/NA	Solid	8082	173295
440-74412-7	CS 07	Total/NA	Solid	8082	173295
440-74412-8	CS 08	Total/NA	Solid	8082	173295
440-74412-9	CS 09	Total/NA	Solid	8082	173295
440-74412-10	CS 10	Total/NA	Solid	8082	173295
440-74412-11	CS 11	Total/NA	Solid	8082	173295
440-74412-17	CS 17	Total/NA	Solid	8082	173295
440-74412-18	CS 18	Total/NA	Solid	8082	173295
440-74412-19	CS 19	Total/NA	Solid	8082	173295
LCS 440-173295/2-A	Lab Control Sample	Total/NA	Solid	8082	173295
MB 440-173295/1-A	Method Blank	Total/NA	Solid	8082	173295

Analysis Batch: 173739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-74412-12	CS 12	Total/NA	Solid	8082	173295
440-74412-13	CS 13	Total/NA	Solid	8082	173295
440-74412-14	CS 14	Total/NA	Solid	8082	173295
440-74412-15	CS 15	Total/NA	Solid	8082	173295
440-74412-16	CS 16	Total/NA	Solid	8082	173295

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX Project

TestAmerica Job ID: 440-74412-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-15
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-14 *
Hawaii	State Program	9	N/A	01-29-15 *
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14 *
Northern Mariana Islands	State Program	9	MP0002	01-31-14 *
Oregon	NELAP	10	4005	01-29-15
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

ARCADIS

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Page 1 of 3

Project Number/Name 03961129.00300 DA Spill Compliance Assistance & Sampling

Project Location 7000 World Way W LA, CA

Laboratory Test America

Project Manager Mike Asakawa

Sampler(s)/Affiliation Matt Worthington / Patrick DeCorse

ANALYSIS / METHOD / SIZE

8082 PCB's only

440-74412 Chain of Custody

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID							Remarks	Total
CS01	Soil	3/28/14 9:45		X							1
CS02		9:55		X							1
CS03		10:10		X							1
CS04		10:25		X							1
CS05		10:35		X							1
CS06		10:50		X							1
CS07		11:10		X							1
CS08		11:18		X							1
CS09		11:30		X							1
CS10		11:45		X							1
CS11		12:30		X							1
CS12		12:50		X							1
CS 13		13:05		X							1
CS 14		13:15		X							1
CS 15		13:25		X							1
										Total No. of Bottles/ Containers	

Sample Matrix: L = Liquid; S = Solid; A = Air

Relinquished by: Matt Worthington	Organization: Arcadis	Date 3/28/14	Time 13:35	Seal Intact?	
Received by: FMD mail room	Organization: TPI	Date 3/28/14	Time 13:35	Yes No (N/A)	
Relinquished by:	Organization:	Date / /	Time	Seal Intact?	
Received by:	Organization:	Date / /	Time	Yes No N/A	

Special Instructions/Remarks:

* 5 day TAT thx Matt

Delivery Method: ☒ In Person ☐ Common Carrier #62 - 6.5°/5.7°C ☐ Lab Courier ☐ Other

SPECIFY

AG 05-12/01

ARCADIS

Laboratory Task Order No./P.O. No. ______

CHAIN-OF-CUSTODY RECORD

Project Number/Name 03961129.00300 AA Spill Compliance Assistance Scarification & Sampling

Project Location 7000 World Way W LA, CA

Laboratory Test America

Project Manager Mike Ackerwicz

Sampler(s)/Affiliation Matt Wertheimer/Patrick DeConnick

ANALYSIS / METHOD / SIZE

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	8082 PCBs only						Remarks	Total
CS 16	Solid	3/27/14 13:45		X							1
CS 17		13:55		X							1
CS 18		14:05		X							1
CS 19		14:13		X							1
CS 20		14:24		X							1
CS 21		3/28/14 9:03		X							1
CS 22		9:20		X							1
CS-23		9:32		X							1
CS-24		9:45		X							1
CS 25		9:55		X							1
CS 26		10:00		X							1
CS 27		10:15		X							1
CS 28		10:20		X							1
CS 29		10:30		X							1
CS 30		10:40		X							1

Sample Matrix: L = Liquid; S = Solid; A = Air

Total No. of Bottles/Containers ______

Relinquished by: Matt Wertheimer	Organization: Arcadis	Date 3/28/14	Time 13:35	Seal Intact?
Received by: [illegible]	Organization: TA	Date 3/28/14	Time 1335	Yes No N/A (circled)
Relinquished by:	Organization:	Date / /	Time	Seal Intact?
Received by:	Organization:	Date / /	Time	Yes No N/A

Special Instructions/Remarks:

* see pg 1

Delivery Method: ☒ In Person ☐ Common Carrier ______ SPECIFY ☐ Lab Courier ☐ Other ______ SPECIFY

62 = 6.5°c / 5.7°c

AG 05-12/01

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297

TAL-0013 (0513)

Client Name / Address: Arcadis, 8001 Irvine Center Dr Suite 1100

Project / PO Number: American Airline 03961129.0000 .00300

Project Manager: Mike Asakawa

Phone Number: 949 450 7903

Sampler: Matt Worthington

~~Fax Number:~~ e-mail Mike.asakawa@arcadis-us.com

Analysis Required: 8082 PCB's only

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives		Special Instructions
Equipment Blk	liquid	Amber	1	3/28/14	10:50	ICED	K	

Relinquished By: Matt Worthington Date / Time: 3/28/14 13:35

Received By: FAXED Date / Time: 3/28/14 1335

Relinquished By: Date / Time:

Received By: Date / Time:

Relinquished By: Date / Time:

Received in Lab By: Date / Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days K
48 hours ____ normal ____

Sample Integrity: (Check)
intact K on ice K

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

#62 - 6.5°C / 5.7°C

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc

Job Number: 440-74412-1

Login Number: 74412

List Source: TestAmerica Irvine

List Number: 1

Creator: Perez, Angel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-79796-1
Client Project/Site: AA LAX PCB Removal

For:
ARCADIS U.S., Inc
Attn: Tania M. Alarcon
9620 Chesapeake Drive, Suite 106
San Diego, California 92123

Attn: George Cebula

Authorized for release by:
6/9/2014 8:17:03 AM

Lena Davidkova, Project Manager II
(949)261-1022
lena.davidkova@testamericainc.com

Table of Contents

Sample Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-79796-1	CS04A	Solid	06/02/14 10:35	06/02/14 15:08
440-79796-2	CS04B	Solid	06/02/14 10:45	06/02/14 15:08
440-79796-3	CS04C	Solid	06/02/14 10:55	06/02/14 15:08
440-79796-4	CS04D	Solid	06/02/14 12:45	06/02/14 15:08
440-79796-5	CS17A	Solid	06/02/14 11:10	06/02/14 15:08
440-79796-6	CS17B	Solid	06/02/14 11:20	06/02/14 15:08
440-79796-7	CS17C	Solid	06/02/14 11:30	06/02/14 15:08
440-79796-8	CS17D	Solid	06/02/14 13:00	06/02/14 15:08
440-79796-9	CS19A	Solid	06/02/14 12:10	06/02/14 15:08
440-79796-10	CS19B	Solid	06/02/14 12:20	06/02/14 15:08
440-79796-11	CS19C	Solid	06/02/14 12:30	06/02/14 15:08
440-79796-12	CS19D	Solid	06/02/14 13:20	06/02/14 15:08
440-79796-13	Equipment Blank	Water	06/02/14 14:00	06/02/14 15:08

Client Sample ID: CS04A

Lab Sample ID: 440-79796-1

Date Collected: 06/02/14 10:35
Matrix: Solid
Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1
Aroclor 1260	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*65*		*45 - 120*	*06/03/14 13:49*	*06/04/14 17:44*	*1*

Client Sample ID: CS04B

Lab Sample ID: 440-79796-2

Date Collected: 06/02/14 10:45
Matrix: Solid
Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1
Aroclor 1260	**110**		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*45 - 120*	*06/03/14 13:49*	*06/04/14 18:00*	*1*

Client Sample ID: CS04C

Lab Sample ID: 440-79796-3

Date Collected: 06/02/14 10:55
Matrix: Solid
Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		49	17	ug/Kg		06/03/14 13:49	06/04/14 18:15	1
Aroclor 1221	ND		49	17	ug/Kg		06/03/14 13:49	06/04/14 18:15	1
Aroclor 1232	ND		49	17	ug/Kg		06/03/14 13:49	06/04/14 18:15	1
Aroclor 1242	ND		49	17	ug/Kg		06/03/14 13:49	06/04/14 18:15	1
Aroclor 1248	ND		49	17	ug/Kg		06/03/14 13:49	06/04/14 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*06/03/14 13:49*	*06/04/14 18:15*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		990	340	ug/Kg		06/03/14 13:49	06/05/14 11:14	20
Aroclor 1260	**3300**		990	340	ug/Kg		06/03/14 13:49	06/05/14 11:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*121*	*X*	*45 - 120*	*06/03/14 13:49*	*06/05/14 11:14*	*20*

Client Sample ID: CS04D

Lab Sample ID: 440-79796-4

Date Collected: 06/02/14 12:45

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:31	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:31	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:31	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:31	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 120*	*06/03/14 13:49*	*06/04/14 18:31*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		2500	840	ug/Kg		06/03/14 13:49	06/05/14 11:30	50
Aroclor 1260	**17000**		2500	840	ug/Kg		06/03/14 13:49	06/05/14 11:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*154*	*X*	*45 - 120*	*06/03/14 13:49*	*06/05/14 11:30*	*50*

Client Sample ID: CS17A

Lab Sample ID: 440-79796-5

Date Collected: 06/02/14 11:10

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1
Aroclor 1260	**37**	**J**	50	17	ug/Kg		06/03/14 13:49	06/04/14 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*06/03/14 13:49*	*06/04/14 18:47*	*1*

Client Sample ID: CS17B

Lab Sample ID: 440-79796-6

Date Collected: 06/02/14 11:20

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 11:46	100
Aroclor 1221	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 11:46	100
Aroclor 1232	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 11:46	100
Aroclor 1242	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 11:46	100
Aroclor 1248	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 11:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*717*	*p X*	*45 - 120*	*06/03/14 13:49*	*06/05/14 11:46*	*100*

Client Sample ID: CS17B

Lab Sample ID: 440-79796-6

Date Collected: 06/02/14 11:20

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		100000	34000	ug/Kg		06/03/14 13:49	06/05/14 12:48	2000
Aroclor 1260	**410000**		100000	34000	ug/Kg		06/03/14 13:49	06/05/14 12:48	2000

Client Sample ID: CS17C

Lab Sample ID: 440-79796-7

Date Collected: 06/02/14 11:30

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:01	100
Aroclor 1221	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:01	100
Aroclor 1232	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:01	100
Aroclor 1242	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:01	100
Aroclor 1248	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:01	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*582*	*p X*	*45 - 120*	*06/03/14 13:49*	*06/05/14 12:01*	*100*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		100000	34000	ug/Kg		06/03/14 13:49	06/05/14 13:04	2000
Aroclor 1260	**330000**		100000	34000	ug/Kg		06/03/14 13:49	06/05/14 13:04	2000

Client Sample ID: CS17D

Lab Sample ID: 440-79796-8

Date Collected: 06/02/14 13:00

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1
Aroclor 1260	**18**	**J**	50	17	ug/Kg		06/03/14 13:49	06/04/14 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*73*		*45 - 120*	*06/03/14 13:49*	*06/04/14 20:05*	*1*

Client Sample ID: CS19A

Lab Sample ID: 440-79796-9

Date Collected: 06/02/14 12:10

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:17	100
Aroclor 1221	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:17	100
Aroclor 1232	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:17	100
Aroclor 1242	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:17	100
Aroclor 1248	ND		5000	1700	ug/Kg		06/03/14 13:49	06/05/14 12:17	100

Client Sample ID: CS19A

Lab Sample ID: 440-79796-9

Date Collected: 06/02/14 12:10

Matrix: Solid

Date Received: 06/02/14 15:08

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*705*	*p X*	*45 - 120*	*06/03/14 13:49*	*06/05/14 12:17*	*100*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		99000	34000	ug/Kg		06/03/14 13:49	06/05/14 13:20	2000
Aroclor 1260	**390000**		99000	34000	ug/Kg		06/03/14 13:49	06/05/14 13:20	2000

Client Sample ID: CS19B

Lab Sample ID: 440-79796-10

Date Collected: 06/02/14 12:20

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1
Aroclor 1260	**63**		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*66*		*45 - 120*	*06/03/14 13:49*	*06/04/14 20:37*	*1*

Client Sample ID: CS19C

Lab Sample ID: 440-79796-11

Date Collected: 06/02/14 12:30

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:53	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:53	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:53	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:53	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*82*		*45 - 120*	*06/03/14 13:49*	*06/04/14 20:53*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		2500	840	ug/Kg		06/03/14 13:49	06/05/14 12:33	50
Aroclor 1260	**10000**		2500	840	ug/Kg		06/03/14 13:49	06/05/14 12:33	50

Client Sample ID: CS19D

Lab Sample ID: 440-79796-12

Date Collected: 06/02/14 13:20

Matrix: Solid

Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Client Sample ID: CS19D — **Lab Sample ID: 440-79796-12**
Date Collected: 06/02/14 13:20 — **Matrix: Solid**
Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1
Aroclor 1260	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*45 - 120*	*06/03/14 13:49*	*06/04/14 21:08*	*1*

Client Sample ID: Equipment Blank — **Lab Sample ID: 440-79796-13**
Date Collected: 06/02/14 14:00 — **Matrix: Water**
Date Received: 06/02/14 15:08

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1221	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1232	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1242	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1248	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1254	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1
Aroclor 1260	ND		0.96	0.24	ug/L		06/03/14 20:14	06/04/14 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*70*		*45 - 120*	*06/03/14 20:14*	*06/04/14 16:09*	*1*

Method Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Client Sample ID: CS04A

Lab Sample ID: 440-79796-1

Date Collected: 06/02/14 10:35

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.06 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.06 g	2 mL	186693	06/04/14 17:44	JM	TAL IRV

Client Sample ID: CS04B

Lab Sample ID: 440-79796-2

Date Collected: 06/02/14 10:45

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.15 g	2 mL	186693	06/04/14 18:00	JM	TAL IRV

Client Sample ID: CS04C

Lab Sample ID: 440-79796-3

Date Collected: 06/02/14 10:55

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.19 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.19 g	2 mL	186693	06/04/14 18:15	JM	TAL IRV
Total/NA	Prep	3546	DL		15.19 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	20	15.19 g	2 mL	186693	06/05/14 11:14	JM	TAL IRV

Client Sample ID: CS04D

Lab Sample ID: 440-79796-4

Date Collected: 06/02/14 12:45

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.13 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.13 g	2 mL	186693	06/04/14 18:31	JM	TAL IRV
Total/NA	Prep	3546	DL		15.13 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	50	15.13 g	2 mL	186693	06/05/14 11:30	JM	TAL IRV

Client Sample ID: CS17A

Lab Sample ID: 440-79796-5

Date Collected: 06/02/14 11:10

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.15 g	2 mL	186693	06/04/14 18:47	JM	TAL IRV

Client Sample ID: CS17B

Lab Sample ID: 440-79796-6

Date Collected: 06/02/14 11:20

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		100	15.00 g	2 mL	186693	06/05/14 11:46	JM	TAL IRV
Total/NA	Prep	3546	DL		15.00 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	2000	15.00 g	2 mL	186693	06/05/14 12:48	JM	TAL IRV

Client Sample ID: CS17C

Lab Sample ID: 440-79796-7

Date Collected: 06/02/14 11:30

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		100	15.04 g	2 mL	186693	06/05/14 12:01	JM	TAL IRV
Total/NA	Prep	3546	DL		15.04 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	2000	15.04 g	2 mL	186693	06/05/14 13:04	JM	TAL IRV

Client Sample ID: CS17D

Lab Sample ID: 440-79796-8

Date Collected: 06/02/14 13:00

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.05 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.05 g	2 mL	186693	06/04/14 20:05	JM	TAL IRV

Client Sample ID: CS19A

Lab Sample ID: 440-79796-9

Date Collected: 06/02/14 12:10

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		100	15.15 g	2 mL	186693	06/05/14 12:17	JM	TAL IRV
Total/NA	Prep	3546	DL		15.15 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	2000	15.15 g	2 mL	186693	06/05/14 13:20	JM	TAL IRV

Client Sample ID: CS19B

Lab Sample ID: 440-79796-10

Date Collected: 06/02/14 12:20

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.03 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.03 g	2 mL	186693	06/04/14 20:37	JM	TAL IRV

Lab Chronicle

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Client Sample ID: CS19C

Lab Sample ID: 440-79796-11

Date Collected: 06/02/14 12:30

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.12 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.12 g	2 mL	186693	06/04/14 20:53	JM	TAL IRV
Total/NA	Prep	3546	DL		15.12 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082	DL	50	15.12 g	2 mL	186693	06/05/14 12:33	JM	TAL IRV

Client Sample ID: CS19D

Lab Sample ID: 440-79796-12

Date Collected: 06/02/14 13:20

Matrix: Solid

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.15 g	2 mL	186470	06/03/14 13:49	QCT	TAL IRV
Total/NA	Analysis	8082		1	15.15 g	2 mL	186693	06/04/14 21:08	JM	TAL IRV

Client Sample ID: Equipment Blank

Lab Sample ID: 440-79796-13

Date Collected: 06/02/14 14:00

Matrix: Water

Date Received: 06/02/14 15:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1045 mL	2 mL	186547	06/03/14 20:14	AB	TAL IRV
Total/NA	Analysis	8082		1	1045 mL	2 mL	186693	06/04/14 16:09	JM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-186470/1-A
Matrix: Solid
Analysis Batch: 186693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1221	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1232	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1242	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1248	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1254	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1
Aroclor 1260	ND		50	17	ug/Kg		06/03/14 13:49	06/04/14 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*45 - 120*	*06/03/14 13:49*	*06/04/14 16:41*	*1*

Lab Sample ID: LCS 440-186470/2-A
Matrix: Solid
Analysis Batch: 186693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186470

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			66.7	60.3		ug/Kg		90	65 - 115		
Aroclor 1260			66.7	58.2		ug/Kg		87	65 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*

Lab Sample ID: 440-79796-1 MS
Matrix: Solid
Analysis Batch: 186693

Client Sample ID: CS04A
Prep Type: Total/NA
Prep Batch: 186470

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		66.3	50.8		ug/Kg		77	50 - 120		
Aroclor 1260	ND		66.3	51.7		ug/Kg		78	50 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*70*		*45 - 120*

Lab Sample ID: 440-79796-1 MSD
Matrix: Solid
Analysis Batch: 186693

Client Sample ID: CS04A
Prep Type: Total/NA
Prep Batch: 186470

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		66.2	51.6		ug/Kg		78	50 - 120	2	30
Aroclor 1260	ND		66.2	51.1		ug/Kg		77	50 - 125	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*70*		*45 - 120*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 440-186547/1-A
Matrix: Water
Analysis Batch: 186693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186547

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1221	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1232	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1242	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1248	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1254	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1
Aroclor 1260	ND		1.0	0.25	ug/L		06/03/14 20:14	06/04/14 14:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*45 - 120*	*06/03/14 20:14*	*06/04/14 14:51*	*1*

Lab Sample ID: LCS 440-186547/4-A
Matrix: Water
Analysis Batch: 186693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186547

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			1.00	0.807	J	ug/L		81	50 - 115		
Aroclor 1260			1.00	0.804	J	ug/L		80	60 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*72*		*45 - 120*

Lab Sample ID: LCSD 440-186547/5-A
Matrix: Water
Analysis Batch: 186693

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 186547

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016			1.00	0.840	J	ug/L		84	50 - 115	4	30
Aroclor 1260			1.00	0.805	J	ug/L		81	60 - 120	0	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*73*		*45 - 120*

GC Semi VOA

Prep Batch: 186470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-79796-1	CS04A	Total/NA	Solid	3546	
440-79796-1 MS	CS04A	Total/NA	Solid	3546	
440-79796-1 MSD	CS04A	Total/NA	Solid	3546	
440-79796-2	CS04B	Total/NA	Solid	3546	
440-79796-3	CS04C	Total/NA	Solid	3546	
440-79796-3 - DL	CS04C	Total/NA	Solid	3546	
440-79796-4 - DL	CS04D	Total/NA	Solid	3546	
440-79796-4	CS04D	Total/NA	Solid	3546	
440-79796-5	CS17A	Total/NA	Solid	3546	
440-79796-6	CS17B	Total/NA	Solid	3546	
440-79796-6 - DL	CS17B	Total/NA	Solid	3546	
440-79796-7 - DL	CS17C	Total/NA	Solid	3546	
440-79796-7	CS17C	Total/NA	Solid	3546	
440-79796-8	CS17D	Total/NA	Solid	3546	
440-79796-9 - DL	CS19A	Total/NA	Solid	3546	
440-79796-9	CS19A	Total/NA	Solid	3546	
440-79796-10	CS19B	Total/NA	Solid	3546	
440-79796-11	CS19C	Total/NA	Solid	3546	
440-79796-11 - DL	CS19C	Total/NA	Solid	3546	
440-79796-12	CS19D	Total/NA	Solid	3546	
LCS 440-186470/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-186470/1-A	Method Blank	Total/NA	Solid	3546	

Prep Batch: 186547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-79796-13	Equipment Blank	Total/NA	Water	3510C	
LCS 440-186547/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-186547/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-186547/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 186693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-79796-1	CS04A	Total/NA	Solid	8082	186470
440-79796-1 MS	CS04A	Total/NA	Solid	8082	186470
440-79796-1 MSD	CS04A	Total/NA	Solid	8082	186470
440-79796-2	CS04B	Total/NA	Solid	8082	186470
440-79796-3	CS04C	Total/NA	Solid	8082	186470
440-79796-3 - DL	CS04C	Total/NA	Solid	8082	186470
440-79796-4	CS04D	Total/NA	Solid	8082	186470
440-79796-4 - DL	CS04D	Total/NA	Solid	8082	186470
440-79796-5	CS17A	Total/NA	Solid	8082	186470
440-79796-6	CS17B	Total/NA	Solid	8082	186470
440-79796-6 - DL	CS17B	Total/NA	Solid	8082	186470
440-79796-7	CS17C	Total/NA	Solid	8082	186470
440-79796-7 - DL	CS17C	Total/NA	Solid	8082	186470
440-79796-8	CS17D	Total/NA	Solid	8082	186470
440-79796-9	CS19A	Total/NA	Solid	8082	186470
440-79796-9 - DL	CS19A	Total/NA	Solid	8082	186470
440-79796-10	CS19B	Total/NA	Solid	8082	186470
440-79796-11	CS19C	Total/NA	Solid	8082	186470
440-79796-11 - DL	CS19C	Total/NA	Solid	8082	186470

GC Semi VOA (Continued)

Analysis Batch: 186693 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-79796-12	CS19D	Total/NA	Solid	8082	186470
440-79796-13	Equipment Blank	Total/NA	Water	8082	186547
LCS 440-186470/2-A	Lab Control Sample	Total/NA	Solid	8082	186470
LCS 440-186547/4-A	Lab Control Sample	Total/NA	Water	8082	186547
LCSD 440-186547/5-A	Lab Control Sample Dup	Total/NA	Water	8082	186547
MB 440-186470/1-A	Method Blank	Total/NA	Solid	8082	186470
MB 440-186547/1-A	Method Blank	Total/NA	Water	8082	186547

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: ARCADIS U.S., Inc
Project/Site: AA LAX PCB Removal

TestAmerica Job ID: 440-79796-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14 *
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-15
California	State Program	9	2706	06-30-14 *
Guam	State Program	9	Cert. No. 12.002r	01-23-15
Hawaii	State Program	9	N/A	01-29-15 *
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-29-15
Northern Mariana Islands	State Program	9	MP0002	01-31-14 *
Oregon	NELAP	10	4005	01-29-15
USDA	Federal		P330-09-00080	06-06-15
USEPA UCMR	Federal	1	CA01531	01-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Irvine

17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

010291

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Mike Asakawa	Site Contact:	Date:	COC No:
Company Name: Arcadis	Tel/Fax: 949 887-3743	Lab Contact:	Carrier:	1 of 2 COCs
Address: 320 Commerce, Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA 92602	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (949) 887-3743	TAT if different from Below			Walk-in Client:
Fax: 949 730 9345	☐ 2 weeks ☑ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: American Airlines PCB removal				Job / SDG No.:
Site: LAX				
P O #				

440-79796 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8082 PCBs only	Sample Specific Notes:
CS04A	6/2/14	10:35	Grab	Dust	1			X	
CS04B		10:45			1			X	
CS04C		10:55			1			X	
CS04D		12:45			1			X	
CS17A		11:10			1			X	
CS17B		11:20			1			X	
CS17C		11:30			1			X	
CS17D		13:00			1			X	
CS19A		12:10			1			X	
CS19B		12:20			1			X	
CS19C		12:30			1			X	
CS19D		13:20			1			X	

Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
5 day TAT Thank Matt

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	6/2/14 15:00			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAI	Date/Time: 6/2/14 1500

#55 = 8.1°C / 7.8°C

TestAmerica Irvine

17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

010292

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Company Name: Arcadis	Tel/Fax:	Lab Contact:	Carrier:	1 of 2 COCs
Address: 320 Commerce Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine CA 92612	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone 949 988X 3743	TAT if different from Below ____			Walk-in Client:
Fax: 949 130 9345	☐ 2 weeks			Lab Sampling
Project Name: American Airline PCB removal	☒ 1 week			
Site: LAX	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8082 PCBs only	Sample Specific Notes.
Equipment Blk	6/2/14	1400	Grab	liquid	1			4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
5 day TAT

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No : | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Matt W.	Arcadis	6/2/14 15:08			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Emilio Meza cms	TA	6/2/14 1508

#59 = 8.1°C / 7.8°C

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc

Job Number: 440-79796-1

Login Number: 79796

List Source: TestAmerica Irvine

List Number: 1

Creator: Kim, Guerry

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	